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Thesis submitted for the degree of Phd in Archaeology, 01-2019, at
The University of Edinburgh

From Tribes to Kingdoms?

Society and Change in South-West Scotland 0 – 600 AD

Alessandra Turrini



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DECLARATION OF OWN WORK

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgement, the work presented is entirely my own.

Name

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Signature



Date

06-01-2019

ACKNOWLEDGEMENTS

Recognition for the outcome of this work must go to my supervisors: Drs. Gordon Thomas and James Fraser, Prof. Steve Boardman, and finally Dr Rick Sowerby and Prof. James Crow, who inherited my project in my final years and did an exceptional job in helping me present my data and ideas. The same can be said of my examiners, Dr Tanja Romankiewicz and Dr James Gerrard. Mention should also go to the many researchers who took time out of their busy schedule to answer my questions: in particular, Mr Stratford Halliday, Prof. Roger Mercer, the exceptional team at Dumfries Museum, and Mr P. McKeague at HES.

Thanks must also go to my family, for their never-ending support; to Dr Tasha Gefreh, for her words of wisdom and encouragement when this project felt unattainable; and to the late John Petrie, for his painstaking proofreading, without which there would be too many typos to count. I wish you could have lived long enough to see this work completed.

Any and all mistakes remain my own.

ABSTRACT

The prehistory and early history of Scotland have been the subject of academic interest since the antiquarian period, but most of this interest has been focused on the Eastern, Northern and Atlantic regions of Scotland. The South-West has not been the subject of any recent regional research efforts, despite the presence of contrasting sites such as Burnswark and Castle O'er, or extraordinary sites such as the Mote of Mark or Whithorn. This thesis aims to fill this gap by examining the available evidence from the Roman Iron Age and Early Historic periods for the region stretching, approximately, from Eastern Dumfriesshire to Northern Ayrshire.

The evidence gathered is primarily archaeological, with a strong emphasis on landscape patterns and imported items. Because of the size of the region, the landscape was sampled using a 25% systematic grid pattern, with the sample unit coinciding with a single Ordnance Survey grid. Key excavated sites which did not fall into the pattern were also included, so as to analyse them within their landscape and situate them within regional patterns. In contrast, because of the limited amount of known items, imported objects from the entire study area have been considered. The thesis also has a secondary historical component, comprised of contemporary texts which describe either South-West Scotland specifically or Brythonic-speaking communities. The texts, analysed in their original language, have been used to clarify, where possible, patterns emerged in the archaeological analysis.

This holistic approach allows a nuanced discussion on the themes of interaction, with the Roman world first and Europe later; social organisation; identity; and social change. The discussion points to the existence of definite regional differences in social organisation and interaction with the Roman world from the early Roman Iron Age, differences which are exacerbated in the following centuries through the economic and socio-cultural choices made by the native communities in their attempt to flourish in a rapidly changing world.

LAY SUMMARY

This thesis explores the South-West of Scotland during and immediately after the Roman period, that is, the first six centuries AD. The main sources of evidence for the discussion are settlement remains and their locations, the artefacts recovered in the region, and written sources. The author argues that the evidence could be interpreted to imply that in the first three centuries AD there were separate groups, with diverse degrees of complexity in their social organization, and which interacted with the Romans differently. The author further argues that these differences helped to shape the economic success, or lack thereof, of these groups in the period between 400 and 600 AD.

ABBREVIATIONS

ADS: Archaeology Data Service

BA: Bronze Age

Dr.: Dragendorff

EIA: Early Iron Age

EH: Early Historic

HES: Historic Environment Scotland

LIA: Late Iron Age

RIA: Roman Iron Age

PSAS: Proceedings of the Society of Antiquaries of Scotland

RCAHMS: Royal Commission on the Ancient and Historical Monuments of Scotland

TDGNHAS: Transactions of the Dumfries and Galloway Natural History and Antiquities Society

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1. INTRODUCTION

The Long Iron Age (fig. 1) of Scotland is a period with extraordinary potential for the study of social change: from the erection of the first brochs in the Early Iron Age (Romankiewicz 2016), to the changes heralded by contact with La Tène Europe in the Middle and Late Iron Ages (Harding 2007, 140–163); from its diverse patterns of interaction with the Roman world (Hunter 2007), to its development into successful, native kingdoms during the Early Historic (Fraser 2009). The latter period has long fascinated the author, who has always wondered about the how and why of this transformation: was it caused by slow, internal changes happening throughout the Iron Ages, or by interaction with the Roman world? Or was it caused by changes in the Early Historic period itself? Was there more than one factor at play?

There is a wealth of recent research for the Roman Iron Age (Erdrich, Giannotta, and Hanson 2000; Fields 2005; Breeze, Thoms, and Hall 2009; Jones 2011; Ingemark 2014), and the Early Historic (Campbell 2007; Driscoll, Geddes, and Hall 2011; McSparron and Williams 2011; Anderson 2011; Clarke, Blackwell, and Goldberg 2012; Duggan 2016), which overall emphasizes the complexity of both periods and the vast differences in socio-cultural practices across the different regions of Scotland. However, one would be hard-pressed to find a significant body of research which straddles both the Late/Roman Iron Age and the Early Historic periods for Scotland, and even more so to find essays delving into the social reality of these times.

Research essays exploring South-West Scotland and its development are even rarer, despite the number of tantalizing and contradictory sites this region holds. There are enough Roman fortifications in Annandale to fuel the theory that the native communities were vehemently hostile to Roman troops (Symonds 2011), yet enough every-day objects

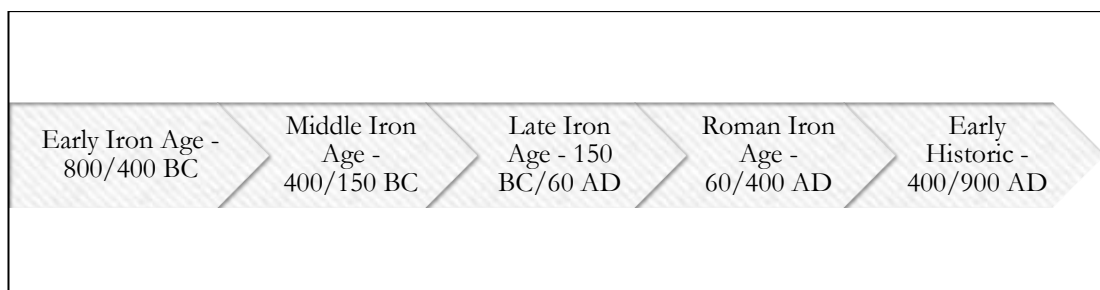


FIGURE 1: THE LONG IRON AGE IN BRITAIN

in the Carlingwarck hoard to posit a flourishing trade with the Romans (Piggot 1952). There are doubts about the long-term impact of the Roman world (Keppie 2004), and yet a possible Roman tiled floor was found as far north as Largs (<http://canmore.org.uk/site/41165/largs>). There are doubts about the level of complexity of this region in the Early Historic period (Harding 2004b, 205–206), yet the site at the Mote of Mark has yielded evidence of a complex society capable of long-distance trade (Laing and Longley 2006), whilst the earliest Christian inscription from Northern Britain was recovered from the *monasterium* at Whithorn, which has fuelled countless papers on early Christianity in northern Britain (e.g. Murray 2007). This list could easily continue: the archaeological landscape of South-West Scotland is extremely varied and unendingly enigmatic.

This project intends to explore these contradictions and to create a narrative of the development and change of native society in South-West Scotland from the beginning of the first century AD to its assimilation into Northumbria in the early seventh century. In particular, the thesis aims to:

- i. Assess and analyse the settlement evidence of South-West Scotland for the Late and Roman Iron Ages and the Early Historic period;
- ii. Discuss the social reality of the native population across these centuries, i.e. their organisation, identity and cultural practices, as far as the evidence allows;
- iii. Create a model of change from the Roman to the Early Historic period which accounts for the idiosyncrasies of this region.

The study area was chosen out of personal interest in its multifaceted landscape and out of previous familiarity with at least some of its archaeological record, thanks to an undergraduate thesis focused on the pre-Agricolan phases of the Roman fort complex at Milton of Tassiesholm (Turrini 2012). On a Roman map, the area can be roughly described as the territory which lies west and south of an imaginary line linking the fort of Birdoswald along Hadrian's Wall (Tony 1997) and the island of Bute. In modern terms, this area is mostly comprised by the Scottish provinces of Dumfriesshire, Kirkcudbrightshire, Wigtownshire, part of Ayrshire, and the islands of Arran and Bute, and by the northern reaches of the English county of Cumbria. Most of this landscape is now covered in plantations or rough pasture, though it also includes some of the best arable lands in the region and a few major towns, such as Dumfries and Ayr (fig.2).

Modern geographical references, of course, meant nothing in the period under scrutiny: when they are used in the text, they are meant as an aid to the reader to help correlate the ancient and contemporary landscapes. Although the overall study area comprises most of SW Scotland, where the text refers to "study area" in the detailed descriptions, this term only refers to the assessed map tiles, which comprise only 25% of the overall area discussed here, and hence not all known sites within SW Scotland are included in the discussion. This applies in particular to the selective assessment of brochs, crannogs, and rectilinear settlements.

The landmass of this region is highly varied, with coastal plains, gentle hills, thin fluvial valleys and harsh elevations alternating themselves across the land. This is the result of the geological background of the region, which, in very broad terms, can be subdivided into two areas, falling either side of the Southern Uplands Fault: the Southern Uplands to the south and the Central Lowlands to the north (Baird 2005, 8) (fig. 3). The northern half of Arran is part of a third geological zone, the Highlands, which is characterized by extremely steep slopes and high elevations (Baird 2005, 8), but, since it represents a very limited percentage of the study area, it can be ignored within the present discussion without significant repercussions.

In the Southern Uplands, the prevalent lithological profiles are Ordovician and Silurian: these strata are approximately 500 to 400 million years old and are characterized by a highly varied composition (Baird 2005, 9; Sissons 1976, 8). In the Central Lowlands, the geology is instead characterised predominantly by Carboniferous age rocks, which are approximately 350 to 280 million years old (Baird 2005, 9). Carboniferous strata are particularly rich in resources such as limestone, coal, clay, oil shale, iron deposits and sandstone (Baird 2005, 25–29), unlike Ordovician and Silurian profiles. The lower elevation areas of the Central Lowlands, concentrated along the Ayrshire coastline, are also rich in sedimentary depositions (Sissons 1976, 1–2), which means that these areas are particularly suitable for crop-growing. In the Southern Uplands, the best arable lands lie in Annandale, in Eastern Dumfriesshire.

As for its morphology, Scotland is a geologically young landscape, as the glacial movement and drainage from the last glaciation period, which ended ca. 13000 BP, eroded all traces of older landscapes (Sissons 1976, 79). The glaciers in the study area drained in two distinctive directions, which can also be roughly summarised using the Southern Upland

fault: to the south of it the movement created a number of long, thin valleys roughly oriented north-south; to the north, the drainage developed in a roughly western

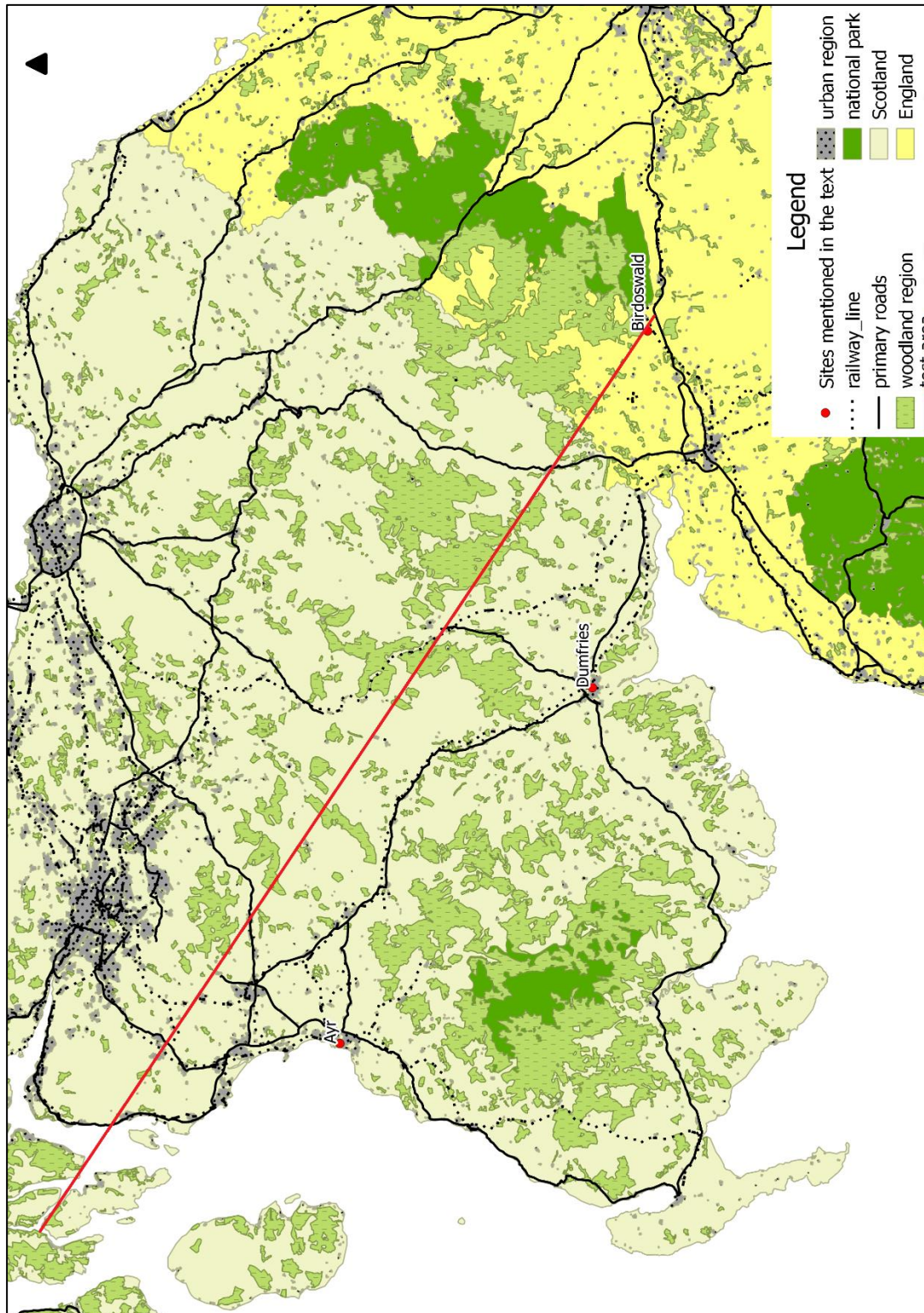


FIGURE 2: STUDY AREA (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

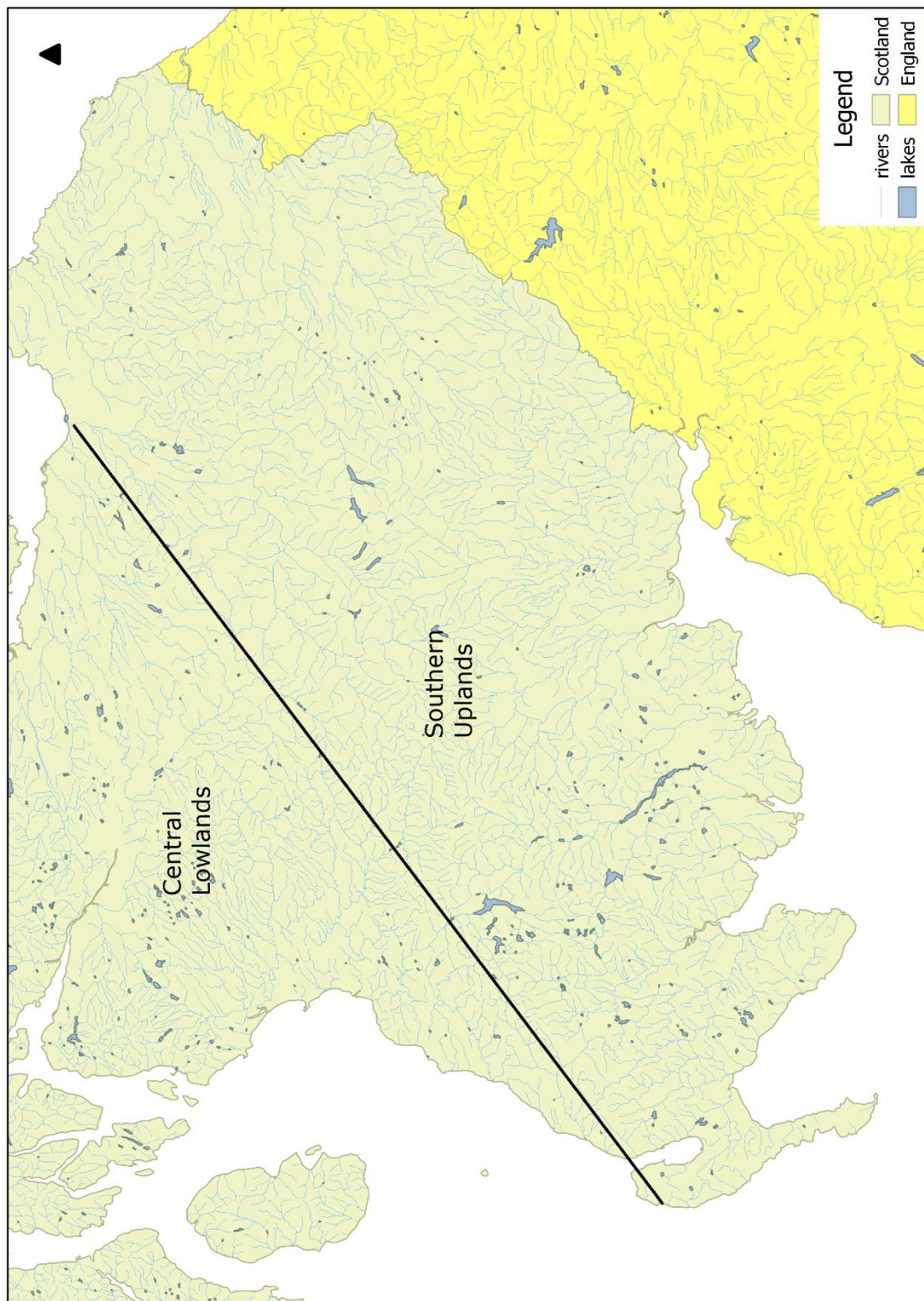


FIGURE 3: GEOMORPHOLOGY (AFTER BAIRD 2005:8; ©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

direction (Sissons 1976, 33–35). This subdivision echoes the hydrology of the area, with modern basins following these lines.

Modern climate trends provide a useful benchmark for the analysis of historical and prehistorical climate in the study area. In the Southern Lowlands, the British meteorological office places the mean annual temperature between 8°C and 9.3°C. The coldest temperatures are usually registered during February, when on average, the mean daily minimum temperature ranges between 0.7° and 1.6°C; the warmest months are July and August, with recorded mean daily maxima of 18.5°C. The wettest seasons are autumn and early winter, but annual precipitations fall short of 1000mm (<http://www.metoffice.gov.uk/climate/uk/ws/print.html>).

In the Central Uplands area, thanks to the influence of the Gulf current, the mean annual temperatures are higher, between 9.5°C and 9.9°C. Along the coast and in the islands the coldest month is once again February, with a mean daily minimum range of about 1°C or 2°C. In the interior, the coldest temperatures are reached in January instead, and range between -3°C and 0°C. The warmest months, once again July and August, see mean daily temperatures around the 15°C mark: slightly below in the hinterland, and slightly above along the coastline. Annual precipitations are similar to those of the Southern Lowlands (<http://www.metoffice.gov.uk/climate/uk/ws/print.html>).

The climatic history of the region, which has been the subject of several papers over time, has been mostly reconstructed through the medium of pollen analysis and the comparison with the wider situation in the northern hemisphere. The six hundred years or so covered in detail by the thesis were climatically unstable, and can be roughly subdivided into two climatic ‘units’:

- i. 50 BC - 400 AD: the middle of the first century BC sees the end of a long period of cold and wet weather (Lamb 1981, 55-56), with the climate largely stabilized to conditions slightly cooler than modern ones (RCAHMS 1997, 17; Wang, Surge, and Mithen 2012, 110). The first centuries AD are characterised by a gradual increase in temperature, with modern mean averages reached ca. 100 AD (Lamb 1981, 56); this temperature increase also translated into the drying up of peat areas ca. 200 AD (Tipping et al. 2012, 13). Despite this trend, there were still periods of

intense precipitations and cooler weather patterns, such as the spell that took place ca. 60-80 AD, and which is attested both by historical sources and by increased silting on local sites (Clarke 1961; *Agricola*, §22).

- ii. 400 - 600 AD: the fifth century is marked by a progressive weather deterioration (PAGES 2k Consortium 2013, 343). This trend is exacerbated in the sixth century by either a single volcanic event or by a series of events of volcanic and meteoric nature ca. 536 AD, which shrouded the atmosphere over the entire northern hemisphere with a layer of ash and gases, and caused a significant drop in temperatures (Gunn 2000; Haldon 2016). Across Northern Europe, the direct consequences of this event lasted between three and fifteen years, but the repercussions on human societies were felt for generations: recent papers have gone as far as to suggest that the bitter cold, famines and plagues which marred the period became embedded in local folklore as Ragnarok, i.e. the end of world, in Scandinavia (Graslund and Price 2012), and as the physical consequences of the death of King Arthur in Britain (Jones 2000). As far as Scotland specifically is concerned, it is argued that Scottish bogs experienced renewed peat deposition between 550 and 750 AD (RCAHMS 1997, 17), and that marshes and swamp retook much of the low-lying lands, as they had in the third and second centuries BC (Lamb 1981, 57).

In summary, the geomorphology of the study area can be described as varied and relatively recent in its formation, with the best resources and lands found in the Ayrshire area. The climate for most of the period under analysis was similar to modern averages until ca. the fifth century AD. The end of the Long Iron Age, though, was marked by a significant deterioration of the climate, with a considerable impact on population groups attested across Europe.

The thesis is divided into twelve chapters. Chapters two and three are the most technical ones, offering an overview of the existing literature and of the methodological approach used by the author. The fourth chapter offers an overview of the Roman presence in the Scottish settlement landscape, and on the value and limitation on Roman coinage as a proxy for dating and interaction.

The fifth chapter heralds the beginning of the analysis itself, by looking at the settlement patterns in the sampled study area and at their possible meanings in terms of native society. Chapter six looks specifically at interaction within and without the sampled study area; and chapter seven concludes the analysis of the Roman Iron Age, bringing together the analyses of the preceding chapters to build a picture of native society across the first three centuries AD.

Chapter eight looks specifically at the fourth and fifth centuries, which, whilst mostly blind to the archaeologist's eye, represent the watershed between the Roman Iron Age and the Early Historic period. The latter's settlement pattern and society are explored in chapters nine and ten. Finally, chapter eleven bridges the Roman and Early Historic period by presenting a coherent theory of social change for the study area. Chapter 12 offers a summary of the research presented here and possibilities for future research. The thesis also includes three appendixes: Appendix 1 offers an overview of the sampled landscape, Appendix 2 a summary of the material culture from the research area, and Appendix 3 a compendium of published bibliographical references for mentioned sites.

2. LITERATURE REVIEW

The basement level of the National Museum of Scotland holds objects and artefacts which describe life in the prehistoric and early medieval times. At the very back, the visitors will find a small area to rest, where a set of television screens offer a simple chronological narrative to offer a better context for the thematic displays. When the screens reach the beginning of the Long Iron Age, they show enclosed settlements, containing wooden roundhouses, and patrolled by men armed with spears. The landscape in the background is largely agricultural, with similar settlements within view. Soon, however, square encampments appear in the background, while Roman soldiers survey the enclosed settlements. While the Roman camps grow into fortifications, the native settlements are abandoned and fall into disrepair. After the Romans leave and their own forts disintegrate, new native settlements appear: tall and imposing stone towers, normally referred to as brochs, are shown rising within enclosed areas, surrounded by smaller stone roundhouses. Warriors armed with swords and shields watch over them until the brochs too fall into disrepair and the first Viking ships land.

This narrative, of course, is only a generalized introduction to the development of Scotland. Even this simple outline, though, was thought to be an impossible achievement in the eighteenth and nineteenth century: the Society of Antiquaries of Scotland had offered a gold medal in 1756 to anyone who compiled a history of Scotland (Chalmers 1887, 1:b2), but the first account, *Caledonia*, was compiled only in 1887. This first history is very different from the modern outline presented above and relies heavily on pseudo-historical sources to create a narrative filled with migrations, invasions and battles led by men whose names now firmly belong in the realm of fantasy and foundation myths. It is, nonetheless, the first modern historical narrative of Scotland and it paved the way for much of the research on Scottish prehistory in the early twentieth century.

The decades before the Second World War, in fact, saw an exponential increase in research and understanding of both the Scottish settlement landscape and individual categories of items, especially of Roman origins. Most of the sites recorded in Canmore by the Royal Commission, in fact, date from this period (McKeague, pers. comm.), thanks to the work of antiquarians who combed the Scottish landscape looking for traces of prehistoric habitation. Chief among these figures is Munro, who catalogued and visited most of the crannogs known at the time (e.g. 1882). Beyond surveys, some of the most

important sites were also first excavated in this period, like Traprain Law (Curle 1915) or the Mote of Mark (Curle 1914).

Roman studies were particularly thriving, and some of the insights gained in this period are still considered valid almost a century later: in particular, mention must be given to the essay on the use of Samian forms as chronological proxies written by Bushe-Fox in 1913, and to the paper on the typology and chronology of glass armlets by Kilbride-Jones (1937). The regular publication of all newly discovered Roman coins in Scotland also begun with this period, with regular updates in the Proceedings of the Society of Antiquarians of Scotland (PSAS) compiled by MacDonald starting from 1918.

Despite this surge in knowledge, Childe's *Prehistoric Scotland* (1940) is but a thin pamphlet, with only a handful of pages dedicated to the Long Iron Age. According to Childe, the Celts invaded the British Isles, bringing the use of iron implements to the island a mere two hundred years ahead of the Roman invasion, and they either replaced or assimilated the previous communities. Their leaders lived in hillforts or crannogs, i.e. wooden roundhouses constructed on artificial islands along lakeshores, until the crannogs-dweller were supplanted by a new wave of immigrants from the south-west of northern England and southern Scotland, who brought with them brochs and the beginning of clan structure. Childe argued, in fact, that the Roman occupation had no lasting impression, though he could offer no insights on the post-Roman period, since "in Scotland the Dark Ages are even darker to the archaeologist than they are to the historian" (1940, 23).

Despite this bleak assessment, research efforts continued. The excavation at Hownam Rings and at other enclosed lowland settlements allowed the creation and debate of chronological models of development for settlements, which soon showed the inadequacy of a two hundred years long Iron Age (Piggott 1948; Hill 1982). The first macro-analyses of the settlement landscape also took place in the post-war period; the most influential of these is Piggott's subdivision of Scotland into four main cultural areas, on the basis of differing settlement typologies and material culture assemblages (1966).

The first key studies on individual Early Historic population groups are also dated to the post-war period, despite Childe's assessment of the uselessness of such an endeavour. Some of the most influential of these essays are Wainwright's *The Problem of the Picts* (1955), Henderson's *The Picts* (1967), Jackson's critical edition of *Y Gododdin* (1969), and

Bannerman's edition of the *Miniugud Senchasa Fher n'Alban* (1974). The first two essays laid the foundation of Pictish studies: Wainwright exposed the inconsistencies in the existing interpretations and proposed a revised chronology of the settlement landscape which Henderson later complemented from a historian's perspective. Jackson championed the presence of a complex Brythonic-speaking society in South-East Scotland, where a torque-wearing warrior-elite was ready to fight and die for its king in exchange for a comfortable lifestyle. Bannerman's text, finally, paved the way for Dalriadan studies, advocating the theory of an Irish invasion ca. 500 AD. All of these research strands were united in 1975 by Duncan in *Scotland: The Making of the Kingdom*. In this retelling, the invasion of the Celts, now set back further in time, is still the starting point of the Iron Age period, though the Roman invasion is now a key event, since, in Duncan's interpretation, it provokes a chain reaction of resettlement throughout the island, which fuels instability and warfare and creates the need for fortified settlements, such as the brochs.

The Making of the Kingdom was published just before a major watershed in the theoretical frameworks of both archaeological and historical research. For the latter, the most important figure is Dumville, who argued that historical texts cannot be trusted to portray the truth, but rather they convey a politically convenient and tactfully edited version of the past in line with the reality and needs of the communities for which the text was written (1977). The recognition of textual biases and aims generated a considerable shift in historical reconstruction, which culminated recently in Fraser's *From Caledonia to Pictland* (2009), where the development of native communities in the fourth, fifth and sixth century is less clear than the much more detailed political and cultural situation of the seventh and eighth centuries.

In archaeology, the culture-history milieu which informed pre-war research was swept aside first by "the loss of innocence" (Clarke 1973) of the discipline, embodied by New Archaeology, or Processualism, which brought with it a better understanding of the limitations of archaeology and an emphasis on a more scientific approach (e.g. Binford 1964 and 1965), and by Post-Processualism, which emphasized human experience and agency, be it by acknowledging the bias of the researcher (Shanks and Hodder 1998), or by recognising non-economic factors in the study of artefacts and landscapes (Hodder 1982; Tilley 1994). These new theoretical frameworks, albeit very different, encouraged

the emergence of new studies which form the background on which the prehistoric narrative of Northern Britain now favoured is built. These studies range from vegetation history analysis (e.g. Robinson and Dickson 1988) to methodological discussions on how to identify settlement patterns (e.g. Bradford 1947); from research projects centred on social change, identity and ethnogenesis, (e.g. Clarke, Blackwell, and Goldberg 2012; Giles 2012; Ingemark 2014), to continuing interest in single categories of items (e.g. Campbell 2007) and individual sites (e.g. Erdrich, Giannotta, and Hanson 2000).

These are, in fact, the studies which informed the simple NMS narrative with which this chapter opened. Since this narrative forms the context of the study area as well, let us look at it in more detail before moving forward. The first screen described depict the beginning of the Iron Age period and belies in its simplicity a time of intense social change, whose key witness in western Europe is the substantial increase in votive depositions, especially of bronze metalwork (Milcent 2009; Cunliffe 2013, 291–302; Roberts et al. 2015). However, the most significant changes did not happen until the period 600–400 BC, when the Bronze Age continental trade network ceased to operate and hillforts and brochs, expressions of changing societies, appear (Hingley 1992; Cunliffe 2013, 292–306; Romankiewicz 2016).

The Middle Iron Age period, ca. 400–150 BC, sees the creation of new trading networks between Britain and Europe, and the emergence, in written sources, art history and historical overviews, of the ‘Celts’ (Moscatti, Arslan, and Vitali 1991; Cunliffe 2003). Contact with mainland Europe is exemplified by the presence of metalwork, both imported and of local production in continental styles, found throughout the island (MacGregor 1976; Megaw and Megaw 1989; Harding 2007). With this network came new ideas and customs, as the spread of funerary rites inspired by continental practices testifies to, such as the Yorkshire chariot burial at Wetwang Slang (Stead 1991). The last two centuries BC saw the beginning of a closer interaction with the Roman world, which begun to fuel the split between Southern Britain, which grew in complexity thanks to the increasing trade with Gaul and the Roman Empire beyond the channel, and Northern Britain, which remained outside this new trading and contact network (Todd 2007a; Cunliffe 2013, 350–364). The rising difference in complexity is best exemplified in numismatic: Southern British groups began minting their own coins following the example of the Romans, and the spread of these currencies can now be used to chart the

rise and fall of the local elites as they tried to garner power and ally themselves with or against the Romans (Van Arsdell 1994; Cunliffe 2007).

Rome's involvement in Britain begun, in fact, with Caesar's invasion of southern Britain in 55-54 BC: this enterprise, while politically unsuccessful, disrupted the existing trading routes and paved the way for the rise in power of Roman-friendly tribes, the first Roman trading enclaves on the island (Cunliffe 2007, 6–10), and diplomatic relations between native elites and the Roman senate (Todd 2007b, 43). The official annexation of Britain begun a century later, under Claudius, in 43 AD, and, despite local resistance and significant rebellions, the advance north was swift. By 72 AD, the Romans held the entirety of Southern Britain, as the building of the first Roman fort at Carlisle attests (Shotter 2009, 17).

The first historically documented campaigns in Scotland occur under Agricola, who held the governorship of *Britannia* between 77 or 78 AD to 83 or 84 AD. The net results of his campaigns are difficult to assess. His annexation of Scotland was short-lived, and most of the fortifications built under him across Southern Scotland were abandoned by the turn of the century in favour of a defence line across the Tyne-Solway, the so-called Stanegate frontier (Breeze and Dobson 1985; Hanson 2007). However, frontiers were not static, impermeable lines within Roman culture, and most Romanists would argue for the continuation of significant interaction with Southern Scotland at the least despite the formal abandonment of fortifications (Crow 2007, 117). The Stanegate line was soon augmented by Hadrian's Wall, whose construction began in 122 AD. Like the previous frontier line, the Wall was both a stop-line in case of raids from the north and a policing area for trade with the areas beyond the Wall, as the number of forts with open gateways north attests (Collins 2012, 26–27).

Soon after the construction of Hadrian's Wall ended, the occupation of Southern Scotland was resumed during the reign of Antoninus Pius (138 – 161 AD): the frontier line was moved north, along the newly constructed Antonine Wall, and forts were rebuilt or newly founded across the landscape. The Antonine occupation of Scotland was short lived as well: by the early 160s AD the northern Wall was abandoned and most forts were demolished, with Hadrian's Wall resuming primacy as the frontier line. However, the retreat did not indicate termination of Roman involvement north of the Wall. Most

tellingly, some forts and fortlets were maintained, such as Birrens (Robertson 1975), which may have remained in use into the third century.

The latter opened with another campaign into Scotland, under the direction of Severus. Unlike previous invasions, though, this campaign was justified, at least by Roman imperial propaganda, by hostile acts carried out by the northern communities. Regardless of the danger effectively posed by unrest beyond the Wall in the early third century (Gerrard 2013, 15–72), as the third, and then the fourth and fifth centuries unfolded, raids from the north, attributed to the Picts and Scots, that is by the former *Caledonii* and Irish communities, became increasingly common (e.g. *Rerum Gestarum*, §XX.1 and XXVI 4.5, Ammianus 1910, Vol. I p.184, Vol.2 p.397).

In response, the frontier tightened border control further, with only a handful of forts maintaining an open gate to the north, while the *vici*, civilian settlements that had grown around the Roman forts, were gradually superseded by intramural settlements as part of a number of changes in layout and defences happening along the Wall, though not uniformly (Collins 2012, 75–81). The same process was probably underway at the Roman forts guarding the eastern and western coastlines, though the research on these is overall lacking (Collins 2012, 78–80). However, the men serving at these forts were no longer Roman legionaries or *auxiliares* from far-flung regions of Europe, but local men, drawn from the neighbouring communities and answering to officers which were also members of the native, Romano-British, elite (Collins 2012, 108–109).

Tradition dictates that Britain ceased to be part of the Roman Empire in 410 AD, though in practice, by this time, the island had already ceased to be considered an integral part of the Western Empire, and may already have been experiencing a significant economic crisis (Fulford 2007; Esmonde Cleary 2007; *contra* Gerrard 2013, 73–117). However, Woolf has suggested that, in practice, south of Hadrian's Wall very little changed in the fabric of society: the non-military zone remained under the control of the same elite, which re-occupied long-abandoned hillforts perhaps as part of a shift toward cultural archaism, but which remained economically tenurial and politically acephalous (2003, 362–367); the military zones, such as the region immediately south of Hadrian's Wall, are the one area where a shift to localized chieftainship was made (2003, 376–379), but this shift was essentially in keeping with the process of localization outlined above. This difference in social development ultimately meant that the previously civil zone was assimilated by

Anglo-Saxon settlers faster than the more cohesive groups in the military areas (Woolf 2003, 306-307), though the process was also greatly helped by plagues and famines, which characterize the Early Historic period throughout Europe (Gunn 2000), and by the economic decline of the main source of wealth of the southern elite: agricultural trade to feed the Roman army (Halsall 2013, 157–183; *contra* Gerrard 2013, 73–117).

North of the Wall, the same groups which had been orchestrating attacks on *Britannia* in the fourth century are becoming increasingly centralised. The Picts, who occupied most of north-east Scotland, began to mark specific locations with symbolic carvings and to coalesce into a single cohesive group: a transformation expressed in the historical record through the creation of a mythical founding figure, Cruithne (Henderson 1967; Clarkson 2008). The Scots settled in the Atlantic zone of Scotland, and adopted the ethnonym Dalriadan, again from the name of the mythological common ancestor who grandfathered the ruling elites of the group (Bannerman 1974). Their centre of power was Dunadd, a nucleated fort in Kintyre (Lane and Campbell 2001).

Outside of these two groups, a similar process of unification was probably underway elsewhere in Southern Scotland, though the record is not as clear as that for Picts and Dalriada. The names of Gododdin, a direct derivative of *Votadini*, and Rheghed have survived as those of kingdoms upon which Welsh poetry (e.g. *Y Gododdin*; *the Poems of Taliesin*) has built the idea of a lost golden age of the Men of the North, but little is known of either of them (McCarthy 2002a; Yorke 2009, 47–48). Just beyond the northern edge of the study area sits another hillfort which at some point in this period became the centre of a historically attested kingdom: Alt Clud, or Dumbarton Rock. The site was partially excavated by Alcock (Alcock and Alcock 1990), but its relationship to the surrounding landscape, and indeed the study area, is unknown. Finally, during the course of the seventh century, most of Southern Scotland was assimilated into Northumbria. Whether this merging happened forcefully or through intermarriage, alliance and cultural transference (Fraser 2010 *contra* Gerrard 2013, 245–273), this event represents the chronological *terminus* of this project.

NEW IDEAS

However, new research is constantly bringing into question this narrative. Roman studies, in particular, are a very active field in Scottish research, and the last two decades have seen

increasing doubts placed on the traditional, Agricola-centred picture of Roman advance in Southern Scotland. Several researchers, on the basis of morphological and stratigraphic features of known Flavian forts, are now in favour of placing the onus for the advance and initial occupation of Scotland at least a decade earlier, during the governorship of Petillus Cerialis, ca. 71 – 74 AD (Shotter 2009; Woolliscroft 2009; Dobat 2009; *contra* Hanson 2009). Assuming that this theory of early occupation is correct, it adds a decade to the period of Flavian occupation of Southern Scotland, which renders this phase a non-insignificant interlude in terms of Roman-Native interaction. Most research on this possibility has focused on Eastern Scotland, but there are at least four unpublished Roman fort complexes in South-West Scotland which have long been suspected to have a pre-Agricola phase, chief of which is Milton (Clarke 1961; Turrini 2012).

At the opposite end of the chronology, the level of long-term Roman impact and the process of ethnogenesis behind the formation of early kingdoms is another area which has seen a number of contrasting theories through the years. As it stands, there are six models proposed by Romanists or Roman Iron Age archaeologists, and two models proposed by medievalist and economic historians, based on the development of communities within and without the Roman Empire. The Roman studies models are:

- i. Unification by internal process: this is an old model (e.g. Mommsen 1886) which has seen a new champion in Keppie (2004). It asserts that the Romans were not a part of Scottish history for long enough to affect long-term changes: anything they might have innovated or disrupted reasserted itself quickly enough that any changes seen in the Early Historic are the result of long-term internal processes.
- ii. Unification by external threat: this model, espoused first by Mann (1974) and later by Heather (1994), has been used both for Scotland and for the wider Roman frontier. They propose that the constant pressure - military, economic and psychological - exercised by the Roman frontier over the disorganised kin-based small groups beyond the frontiers led over time to larger and larger conglomerations, in an effort to even the relationship with the empire.
- iii. Unification by external imposition: this model, which is the obverse of the previous one, has been proposed in recent research on ethnogenesis among Germanic groups. Its proponents have observed that there is no archaeologically visible expression of ethnicity among individual groups in the pre-Roman period,

and correspondingly no historically reliable expression of ethnicity save for Roman sources (Gillet 2002; Brather 2002). Their suggestion is that these groups did not recognize themselves as a single stable society until after they settled into Roman lands, as a result of continued contact with a different culture which considered and treated them as one (Bowlus 2002).

- iv. Unification through external input: this model was born from research into the Scottish Late and Roman Iron Ages, and it impinges on the Roman practice of remunerating friendly elites on the outskirts of the frontier to promote stability. In this model, the practice led to the progressive economic strengthening of the Roman-friendly elites, who in turn used their income to fuel their social status and attract an ever larger swathe of the population under their leadership (Macinnes 1984).
- v. Dissolution through external input: this model was proposed as a possible alternative to the previous one both by Macinnes herself and by Armit. It posits that, once the supply of gifts ceased in the post-Antonine period, the elites could no longer hold pre-eminence over their group or groups, which caused the disintegration of the larger groups; the rise of new elites; and a possible climate of hostility towards the Roman world south of the Wall (Macinnes 1984; Armit 1999).
- vi. Dissolution/unification by external input: The previous models purport, at least to some degree, to offer an explanation which can be applied throughout the Scottish landscape. Hunter attempted to test Keppie, Mann, Macinnes and Armit's models against the archaeological evidence left by the Picts, and found that Macinnes' dissolution model applies best to the late Roman period, but it is then followed by a period of unification under a new elite which may, in fact, retain some elements of Roman culture in their artistic expression (2007). The strength of this model is its emphasis on the extremely varied archaeological landscape of Scotland, where more than a single explanation may indeed be needed to explain any process in this period.

The models proposed by economic historians differ mostly on whether the motor of change is considered to be internal or external to the community under scrutiny. The two models are:

- i. Trader-led change: this model proposes that social changes are the result of the actions of traders during the Early Historic period, who encouraged the growth of *emporia* as trading centres to increase their own profit, which in turn increased the economic capabilities of local elites and thus their power base (Callmer, 2002, in Hodges 2010, 98).
- ii. Profit-led change: this model suggests instead that a shift in the exchange patterns of the late Roman Iron Age is the root cause of the accretion of the elites' power bases: rather than largely redistributing wealth accumulated from the local contact networks through the population, the elites started accumulating it. This process, in time, allowed them to engage in long-distance trade and ultimately led to the creation of centralised authority as wealth and power accumulated within single families (Hodges 1982, 2010, 97; McCormick 2001).

However, the level of dialogue among the proponents of different models is minimal (Hunter 2007) and the subject will require substantial research efforts before a consensus can be reached (ScARF 2012, esp. i–ii, 12–14, 21–27). The only community within Scotland which has seen significant dialogue in terms of ethnogenesis is that of the Dál Riata. As outlined above, they are traditionally considered immigrant settlers of Irish origin on the basis of a *prima facie* reading of texts such as the *Miniugud Senchasa*, but both archaeologists and historians are now attacking this claim. Their approaches range from long-term contact shaping both the British and Irish coastlines along the same lines (Fraser 2009, 1:148–149); to a completely nativist approach (Campbell 2001); to a more complex approach which turns the invasion argument in the opposite direction, proposing instead that a group of people from the Scottish coastline moved into Antrim whilst maintaining close ties with their homeland (McSparron and Williams 2011; Woolf 2012).

Finally, there is another trend which is beginning to emerge among prehistoric archaeologists, and which is likely to have repercussions in the accepted narrative of prehistoric Scotland as well: the reassessment of human mobility. Migration in the absence of undeniable written evidence has been, in fact, almost universally avoided as an explanation in contemporary archaeological research because of its misuse in the first half of the twentieth century. However, in the last few years the argument has been brought forward that it is not feasible to discard *a priori* the idea of population movement on such

grounds, given the evidence for human mobility throughout history (e.g. Fernández-Götz 2014, 131–134; de Ligt and Tacoma 2015).

THE DARK SIDE OF THE MOON

By this point, the trend anticipated in the introduction may have become clear: mentions of South-West Scotland are few and far between, no matter which period of the later Long Iron Age one is considering. This is not a recent trend: already in 1968 Fenton, writing an analysis on agriculture practices in Dumfriesshire, commented on the dearth of research in the area despite the fact that, “situated as it is in the angle between England, Ireland, and the rest of Scotland [...] the South-West has a potentially high degree of interest for those who study the reasons for and relationship between geographical, cultural, linguistic, and national boundaries” (1968, 147).

Fenton’s words did not have an impact on the academic community and were thus echoed once more by Alcock in 1992, in a short article titled *Message from the Dark Side of the Moon*. In this essay, he urged his fellow researchers to begin considering the western coast of Britain with the same attention dedicated to the eastern and northern zones. His chief concern in this brief piece was Wales, but in his assessment of the South-West of Scotland he noted that the available evidence suggested that Southern Scotland should not be treated as a whole, as the settlement evidence was indicative of differences between the communities of the eastern and western halves of the region (1992, 8).

Despite Alcock’s importance within Early Historic studies (e.g. Alcock and Alcock 1993), the amount of regional studies on the native societies of South-West Scotland remains low. In fact, an MA thesis from 1966 is still one of the most in-depth texts specifically on native societies of South-West Scotland during the Roman Iron Age. Its author, Wilson, catalogued known Roman finds from non-Roman sites, cross-checked their distribution against known and presumed Roman roads, and concluded that the Roman road system was based on tribal boundaries and that it intentionally subdivided friendly tribes, i.e. those who received access to Roman goods, from hostile ones. This thesis is the first research project to note the incongruence between the extraordinarily high number of Roman fortifications and the low number of high-status Roman objects in native sites in Dumfriesshire. These characteristics were more recently emphasized again by Symonds,

who argues that at least some elements of the native communities in the Annan basin were actively hostile towards Roman troops and engaged in guerrilla-style fighting (2011).

The next major regional study is the survey of Eastern Dumfriesshire sponsored by the RCAHMS (1997). However, the findings of this survey within the Roman Iron Age and Early Historic periods highlight what is missing perhaps more than what is there. The difficulties in fine-tuning the chronology of native sites without Roman material hinder a discussion on Romanization, though the survey does offer some tentative chronological guidelines for the settlement types of the Iron Age period (1997, 118-167). Similarly, the dearth of later Roman Iron Age and Early Historic non-Anglo-Saxon settlements is at odds with palynological studies, which hinders the discussion of the post-Roman period (1997: 185, 221). It certainly does not help either that the majority of finds lies unpublished (Wilson 2003, 105–106), nor does the preferential publication of Roman over native material culture help in assessing social complexity, intra-group interaction, and cultural change.

Beyond regional studies, there has been relatively recent research with regards to individual sites of particular importance. Chief among them is Whithorn, a monastic community where, according to tradition (e.g. Forbes 1874, 140), St Ninian built his *Candida Casa* and Scotland's first bishopric. Beyond legend, Whithorn is known for the earliest Christian inscription in the country, the Latinus Stone (Forsyth 2007), and for one of the richest assemblages of continental imports in Scotland ever found (Hill 1997). Whithorn has also been the fulcrum of the debate on the advent of Christianity in Scotland, and specifically over its Roman origins or otherwise. Some scholars, following Hill's interpretation of the site as founded by an immigrant community, have stressed the tension between Romans and natives, and thus the low likelihood of a cultural transference (Wooding 2007, 10; Woolf 2007, 5). Others have remarked on the continued contact throughout the Roman period, fuelled in no small part by the trading opportunities presented by the markets in the military zone, and have argued instead for Christianity as a fourth century phenomenon (Petts 2003; Forsyth 2007). Neither side of the argument, however, is based on region-specific studies on social organisation and cultural norms.

Following closely behind Whithorn, there is the site of the Mote of Mark (Laing and Longley 2006), a coastal hillfort which has yielded almost five hundred fragments of

moulds for brooches, pins and other small metalwork pieces. The Mote has been since dubbed a princely site, though its title is now contested by Trusty's Hill (Toolis and Bowles 2017). Both sites sit along the southern coastline, but their relationship to each other and to the surrounding settlements has yet to be explored in detail. The only Roman Iron Age site which has had a significant amount of discussion in recent times is Burnswark, a multi-phase hillfort and open settlement which may or may not also be the site of a Roman siege (Davies 1972 *contra* Campbell 2003). There are a few other excavated or partially excavated sites, but none which has received significant discussion in its own merit or within its landscape, outside of the Eastern Dumfriesshire area. In other words, almost fifty years after Fenton remarked on the unexploited potential of the South-West for studies on social changes, and despite the current interest in this very topic, this region is still very much part of 'the dark side of the moon'.

3. METHODOLOGY

Because of an overall assumption that a multi-faceted set of evidence can allow the creation of a more nuanced interpretation of the past than the study of a single set of evidence, a number of diverse types of data have been interrogated to help review the Late Long Iron Age of the study area, which, as already stated (pp. 12 – 13), was chosen out of personal interest and familiarity. This has resulted in a multi-disciplinary approach, based on settlement evidence, macro-landscape patterns, material culture analysis, and historical sources. However, precedence in the analysis was given to the archaeological evidence, with historical works only used to answer specific questions raised by the former rather than as the guiding principle of the research.

LANDSCAPE

The specific boundaries of the study area were chosen either because of their relevance or because of necessity. The southern boundary coincides with the line of Hadrian's Wall, which effectively divides what was and was not Britannia during at least some of the Roman chapter of British history. The eastern boundary effectively coincides with the areas which have been surveyed, as there are several examples of tiles in the Canmore dataset where there are almost no prehistoric and early historic sites listed. An example of this is the NGR grid NS60, which has the dubious honour of only having a single enclosure listed, Lochbrowan (118983). The northern boundary roughly reaches up to, but excludes, modern Renfrewshire, as Halliday indicated that most of the survey data held for the county are unreliable (pers. comm.).

The project, in fact, relies primarily on the record of known settlements and features which has been compiled by the Royal Commission and rendered accessible to the public through the website Canmore (<http://canmore.rcahams.gov.uk>). Canmore data is limited to Scotland; the landscape of the small portion of Cumbria which is included in the research project has been analysed with the aid of ADS (<http://archaeologydataservice.ac.uk>). It is acknowledged that this only provides a very partial record of recent developer-funded investigations logged by commercial archaeological companies into the ADS database. It does not contain a full list of archaeological sites in the area, and the Cumbrian data, therefore, represents only a selective sample of sites, not a full assessment

as undertaken for the other map tiles within Scotland. A comprehensive assessment of sites compared to the Scottish material is not presented here.

Most of these landscapes, whether north or south of the Scottish/English border, is derived from surveys rather than from excavation, aside from a few significant exceptions like Whithorn (Hill and Pollock 1991), the Mote of Mark (Laing and Longley 2006) or Burnswark (see Gazetteer). This is problematic for a number of reasons. Firstly, the success of a survey is based on an individual surveyor's experience, expectations, and knowledge. In the words of a long-term surveyor for the RCAHMS, "to some extent, surveyors find what they look for" (Halliday 2013, 74)

A good example of this concept, and one which is also visible in the sampled study area, is the uneven distribution of burnt mounds, which used to be uncommon and are now being found by the hundred by contemporary surveyors familiar to the varying character of this monument type (Halliday 2013). In fact, the distribution of these features is not considered indicative of their spread but of the reach of modern surveys, as the two are coincidental (Cowley 2011, 45–47). In other words, the origin of the dataset impacts on the consistency of its quality and accuracy over space and time. This pattern has required a careful balance in examining the reach of regional patterns, which has translated, wherever possible, in giving pre-eminence to evidence from areas with a higher number of sites because of more intense research, and less importance, or a more doubtful approach, to areas with older surveys and less sites known overall.

The second aspect to consider is that of survival. Land usage, be it modern or past, has had a significant effect on the landscape, which translates to the slow erasing of the less imposing settlements and enclosures over time: the shallower a ditch or the lower a rampart, the less chances there are that in agricultural areas a settlement will survive on the surface. Even cropmark survival is problematic, as it depends on specific soil conditions, agricultural practices and dry weather, so that, just as for burnt mounds, the spread of cropmarks is largely coincidental with maps detailing arable lands with well-drained soil (Cowley 2011, 47–48). In practice, this also means that in large swathes of the landscape the record becomes skewed overall towards defended settlements and hillforts, with stone architecture, in particular, leaving the biggest footprint. Another issue in less agriculturally important areas is land-cover: plantations obscure vast areas of the modern landscape of the South-West (see fig. 2), rendering it impossible to see any archaeological

site beneath the tree cover; while tall grass and rushes obscure archaeological monuments in pasture areas for most of the year. In practice, this has required constant awareness of the character and formation of the modern landscape before the analysis of any settlement pattern was carried out.

The last issue to consider is that of chronology: because the bulk of the sites have not been dated either through material culture or radiocarbon analysis, and because of the longevity of most settlement forms in Scotland (Hingley 1992, 2007), it is impossible to state without a doubt the precise chronology of settlement trends. External comparisons with similar features and archaeological landscapes - albeit limited in the scope of assessment undertaken here -, especially from Eastern Scotland, Northumberland and Cumbria have been used to facilitate discussion, although the different social contexts of these regions may have led to similar landscapes in different periods or circumstances.

ON SAMPLING

The scale of the region under consideration, coupled with the chronological depth of the research project and the temporal constraints of a doctoral thesis, has suggested the use of a sampling strategy. The research design aimed to survey approximately 25% of the total landscape, which was thought to be an adequate portion of the landscape to evaluate the region and attempt to answer the core questions of the thesis.

The sampling unit chosen is the same as that of the Ordnance Survey National Grid, with each grid covering a hundred square kilometres and, in most cases, several prehistoric settlements. The sampling pattern used is the systematic simple grid, with the addition of grids housing major excavations and the occasional substitution with neighbouring tiles of those grids which contained more sea or Roman-held territory than native-held landscape (fig. 4). In addition, other units which house major excavated and fully published sites have also been included, regardless of the sample pattern, in recognition of the importance of these sites. A complete outline of the sampled landscape is offered in fig.4, while a grid by grid overview is available in Appendix 1.

Within the individual sample units, all sites which may be either Late or Roman Iron Age and Early Historic, have been researched and added to a database, which has been converted into a GIS format for landscape analysis and presentation purposes. In addition, sites of ritual significance which predate the study period have also been

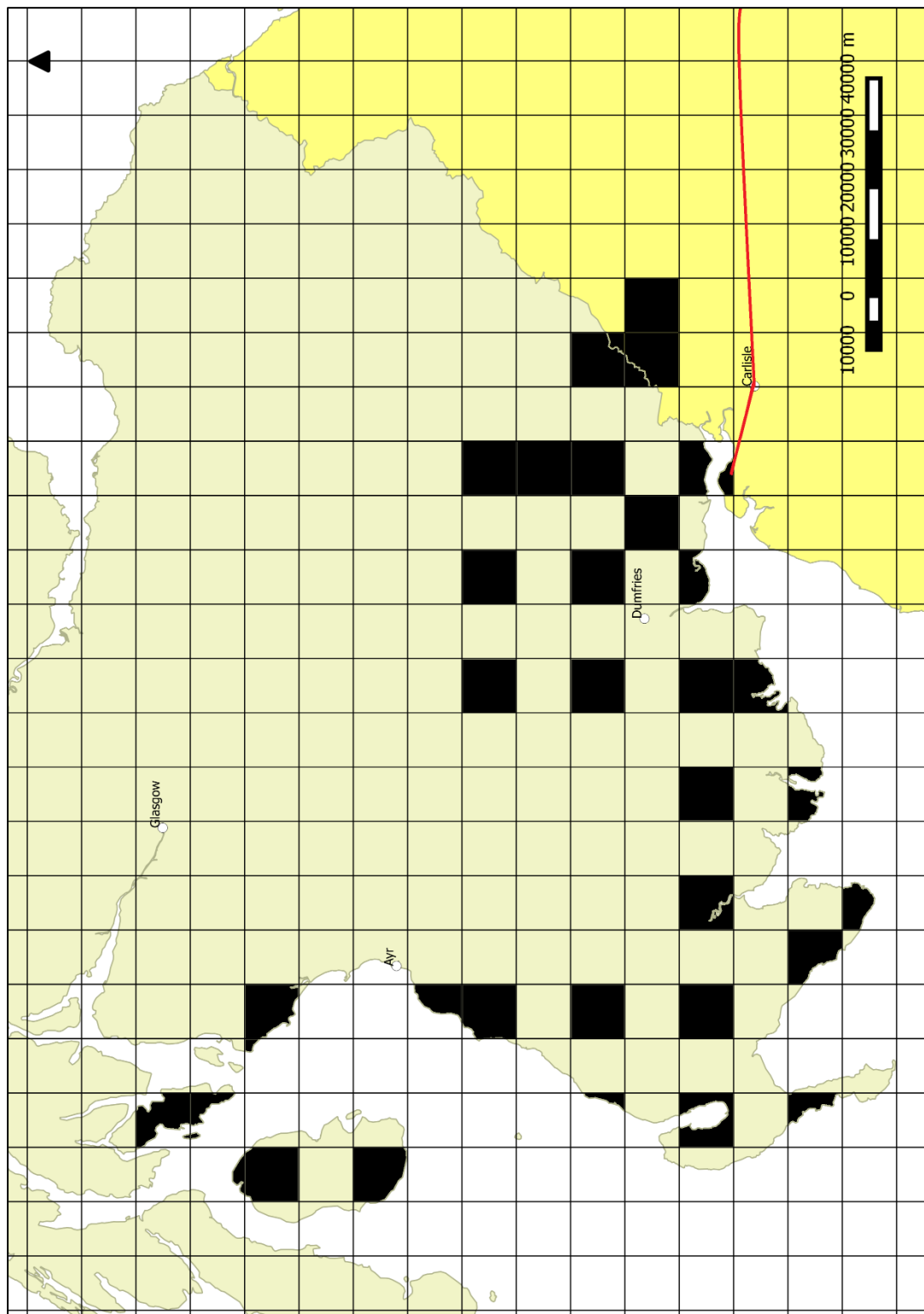


FIGURE 4: SAMPLED STUDY AREA, WITH CORE MODERN CITIES AND ROUGH LINE OF HADRIAN'S WALL SHOWN (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

recorded, because of their possible relevance in identifying pre-existing boundaries (Giles 2012) which may or may not still have been relevant during the Late Long Iron Age (see *A Theory of Change*, pp. 237 – 252).

Because most of the landscape analysis hinges on land-use and visual and inter-visual concerns, only those sites which have at least a six-number grid definition in their Canmore/ADS record have been included in the viewshed analyses, as data with a lower geographical definition would have cast doubt on the result. It ought to be noted, however, that the overall percentage of those sites with a lower quality coordinate record is not high, and they may be still be seen in general maps and in maps in Appendix 1, where they are presented with different icons to the remainder of the archaeological landscape.

The chosen sampling strategy falls outside the current fashion for random sample grids, initiated, among others, by Binford (1964). It may, therefore, be helpful to present the rationale behind this choice before moving further. Generally speaking, sample grids can be either random or systematic. Systematic grids, as the name suggests, are based on a structured system, and they can be either simple, like the one chosen for the project, or stratified unaligned. A simple systematic grid will resemble a chessboard, while in a stratified unaligned grid the chosen sample units do not lie on the same axis: this is exemplified by illustrations 1 and 2 in fig.5. Random grids, on the other hand, rely on tables of random numbers, and they can either be simple or stratified. The distinction is based on the fact that stratified grids assign a number of sample units proportional to each geographical strata, such as, for example, hills, plains, and mountains, while a simple random grid does not account for land type or use. They are exemplified in illustrations 3 and 4 of fig.5. The different colours in illustration 4 represent different geographical strata.

From a theoretical perspective, both systematic sampling systems are better at gauging spatial variations than random grids are, though, of the two, stratified samples render it statistically impossible to miss every single occurrence of a regular pattern (Plog 1976, 140). Considering the primary goal of evaluating the entirety of the landscape, most of which has not been surveyed as a unit in previous studies, a systematic grid was considered more suitable to provide an even view of the whole region, without giving pre-eminence

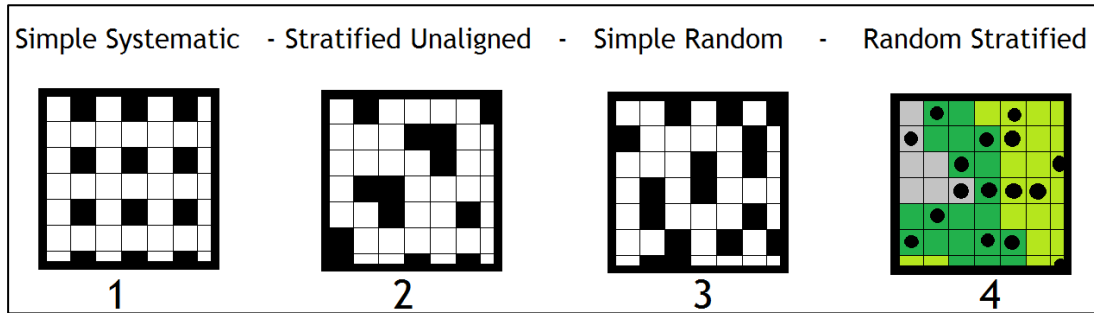


FIGURE 5: VISUAL REPRESENTATION OF DIFFERENT SAMPLING TECHNIQUES COVERING 25% OF A LANDSCAPE

to any geographical strata or running the risk of missing wide regional patterns because of a randomized perspective.

Leaving theoretical arguments aside, practical tests of the results of individual sampling strategies concur in highlighting the inefficiency of random samples. In a study conducted in Mexico in 1976, Plog and his team selected a number of regions with optimal surveying conditions and tested all four techniques using a 10% sample. Throughout all of their tests, simple random grids routinely turned out to be the least efficient and the least apt at capturing linear trends. The tests also highlighted how the differences in accuracy and efficiency of the different grids were not statistically significant, although, in general, systematic grids, both stratified unaligned and simple, yielded generally better results. Similar conclusions were reached in a study on the efficiency and economy of sampling techniques published by Judge, Hebert, and Hitchcock (1979), which found that systematic and random grids are equally effective. In Plog's own words, "for surveying unknown areas, the simplest sampling designs may well be the most practical" (Plog 1976, 158).

Beyond the practicality of limiting the landscape dataset within what could be tackled within the confines of a three-year project, there also was another reason for choosing a sampling methodology. With the most relevant exception of Cavers' (2010) study on crannogs and later prehistoric settlements, which include a number of case studies from the Scottish landscape, the majority of current studies only look at a single region in its totality (for example, RCAHMS 1997; Mercer and Tipping 1997), and it was the intention of the author to compare the conclusions reached in the current setting to those of the

few published and unpublished assessments of South-West Scotland, to assess the value of sample methodologies against complete microanalysis.

MATERIAL CULTURE

The origin of the bulk of the settlement dataset has had a cascade effect on the known material culture for the study area. In particular, this translates into a limited number of complete assemblages, and even more of fully published assemblages, and a relatively small number of diverse items, mostly coins or metalwork, found by chance over the last two centuries, with no contextual information and, often, no clearer indication than a parish as to their discovery location (see Appendix 2). In some cases, only notice of discovery survives, with the item itself having since been lost. Beyond this issue, before modern standards for record-keeping became the norms most reports focussed significantly more on Roman or imported items, rather than on native and undiagnostic material.

This has required a different approach to the material culture evidence than that of the landscape evidence. The first difference lies in the fact that the data has been gathered from the entire study area and not just from the sample units. This allows a wider dataset, though it bears keeping in mind that for most items, the location indicated in distribution maps will be the parish centre, in the absence of a more precise indication. There also is a bias in the patterning of the objects, with the bulk of the data concentrated in areas close to Roman roads and forts, though this pattern is somewhat tempered by coastal finds and objects unearthed during agricultural and farming activities.

It was also felt that the most fruitful approach to material culture would be achieved by concentrating on its strengths, i.e. non-native items. The generalized location of the finds may not be conducive to micro-analysis and to understanding the spread of items from a single site to those around it, but it permits some understanding of the contact networks between the study area and the rest of Europe at a macro-scale, and speculation on the nature of the relationship through the comparison of the different types of objects across the region.

The premise behind this choice is that the non-native items, regardless of whether they were gifted, traded, or raided, still represent an expression of choice by the native population: in other words, the presence of a specific item is not merely due to supply but also to demand. For example, a Roman Samian bowl is not found in a settlement or a pit

because that was what the Roman soldiers or envoys had available to exchange, but because it was brought to exchange in the knowledge that it would be a prized item. This approach has been heavily influenced by Ingemark's theory of agency in the selection and deposition of imported items, which was based on studies on exchange and economy between Native American and Settlers in the eighteenth and nineteenth centuries (2014).

Given this objective, the database has been built to cover:

- i. Complete assemblages from major excavations
- ii. Hoards and coin hoards
- iii. Brooches
- iv. Figurines
- v. Beads
- vi. Pottery
- vii. Tripods and cauldrons.

These categories form the bulk of the known items from the study area and are the ones most commonly exchanged or otherwise obtained from non-local contexts.

HISTORICAL SOURCES

Most of the historical sources which describe the study area in the Roman Iron Age and the Early Historic were actually composed much later. Chronological distance, pseudo-historical conceptions, political goals, cultural differences, origin myths and the creation of a lost golden era imbued these later sources with a distorted perception of the past (Dumville 1977; Fraser 2007, 2009). In light of this, the decision has been made to select for discussion only those sources which are either contemporary with their subject matter or based on contemporary sources which have not survived. Furthermore, only those sources which describe South-West Scotland or the Brythonic-speaking communities, in general, have been included.

This decision has been made because the degree of similarity between South-West Scotland, Ireland, Anglo-Saxons societies, and Northern Europe in this period cannot be stated with surety (*contra* Stafford 2013), especially in light of the diverse contexts of each of these societies. The same could be said for South-West Scotland and the rest of Britain, despite the shared linguistic roots and, to a degree, shared influences. However, to exclude these sources would reduce the number of historical texts to a level beneath what would

allow for a meaningful discussion, so Brythonic-centred sources have also been interrogated. Their usefulness, however, is constantly questioned against the background of archaeology, and, wherever there is a significant dichotomy between the two, the differences are highlighted as dissimilarities in context between the text and the reality of South-West Scotland. Sources which do not form part of the main historic corpus of the thesis, i.e. texts which regard the excluded groups above, have been occasionally used to offer a wider perspective and to show similarities or differences in the experiences of the peoples of South-West Scotland compared to Europe.

The primary sources most widely used in the discussion are:

- i. Ptolemy's *Γεωγραφικὴ Ὑφήγησις* (1843): more readily known as *Geography*, this is a cartographic description of the known world (Europe, Africa and Asia) compiled ca. AD 150 from a Mediterranean perspective. The text is based on *Itineraria* guides and on the work of earlier cartographers, chief of which is Marinos of Tyre, but it revolutionized contemporary cartography by making consistent use of latitude and longitude coordinates for the listed sites (Berggren and Jones 2000). These are mostly population names, cities and key geographical features such as rivers and bays. Book II, Chapter III describes Scotland and will be the section most used in the discussion. It is commonly understood that this section is based on Flavian military intelligence (Hanson 1991, 23–5): the text offers, therefore, an outsider's perspective, which may or may not coincide with that of a native.
- ii. Tacitus's *Agricola* (2006a): this text, written by a Roman historian of the first and early second century AD famous for his historical treatises, is a cross between a biography and a cultural statement. It recounts the endeavours of Tacitus' father-in-law, Agricola, who operated in what is now Scotland while governor in Britain. Agricola's achievements, however, are consistently exaggerated, and he is compared to both Caesar and Alexander the Great (§5,10) (Birley 2009, 50–1). Furthermore, both the introduction of the work and the fine oratorical speech put in the mouth of Agricola's Caledonian opponent Calgacus (§30) hint at dissatisfaction against the political climate of the last decade of the first century AD (Birley 2009; Tacitus 2006a, 20–21). Both the personal bias in favour of Agricola and the

underlying political statement of the text need to be taken into careful account in any discussion of the historical and archaeological value of the *Agricola*.

- iii. The *Ravenna Cosmography* (Richmond and Crawford 1949): this text is a late seventh or early eighth century anonymous place-name compilation based on a wide variety of sources. In terms of its British section, the sources are all consistent with Roman period *Itineraria* and with Ptolemy's *Geography* (Rivet and Smith 1979, 185–197; Richmond and Crawford 1949, 3–4), compared to which the text offers almost three times as many place names (Richmond and Crawford 1949, 2). However, the *Cosmography* is little more than a list of place-names, with no indication of what they are, no distinction between Roman locations and native ones beyond what linguists can surmise, and no coordinates with which to place them securely (Richmond and Crawford 1949, 14).
- iv. Ammianus' *Rerum Gestarum* (for the Latin text, see 1910; for a recent translation, see 1986): This text is a late fourth century essay on Roman history, which was meant to continue Tacitus' *Histories* and *Annals*. It originally spanned from Nerva to Valens, although only the last eighteen volumes, covering the period from AD 353 to AD 378, survive. The author, a highly read Greek individual who joined the army in his youth and later moved to Rome, has presented the fourth century in a highly engaging style, with frequent allusions to Vergil and to most of the historians of Greek and Roman tradition, mixed with references to personal experiences as a soldier. The latter creates a viewpoint skewed towards the particular over the strategy of individual battles, but an analysis of the instances of first-person episodes show that the usage of autopsy is always concomitant to instances of loneliness or danger: an oblique way to convey the work's uniqueness and how it may never have been written (Kelly 2009, 70–72). Indirectness is also Ammianus' preferred way to convey ideas to his readers. His chief targets are Barbarians, Christians, and Theodosius, which he critiqued through exclusion from *exempla*, irony, and the framing of the battle of Adrianople (Kelly 2009, esp. 3, 13–14, 26–28, 294).

- v. Gildas' *De Excidio et Conquestu Britanniae* (1978, 2006): This is the only sixth century British text with a historical component to have survived, but the exact area Gildas was writing from is unclear, so that it is difficult to securely identify some of the people and place-names used in the text. In the first twenty-six chapters, Gildas paints an overall dreary account of life in fifth and sixth century Britain, before launching into an eighty-four chapter long critique of the shortcomings and sins of current kings, leaders and religious figures of the island. This second section is heavily influenced by religious texts, and in the comparison and contrast between the two parts lies the author's motive for writing the book: the historical account is used as an educative mirror to show the consequences of vice (e.g. §21) against the benefits of virtue (e.g. §25) (Lapidge and Dumville 1984; Fraser 2010, 266).
- vi. The *Annals of Iona* (Charles-Edwards 2006): Annals are a sequence of very short entries depicting historic facts, either recorded in a yearly fashion as they happened, or interpolated from other accounts at a later date. The *Annals of Iona* are the reconstructed precursor to the Irish Annals, which are thought to originate from a copy of Rufinus-Suspicius, an early fifth century chronicle from Gaul, which was carried to Ireland and then acquired by St. Columba in the middle of the sixth century, who transferred it to Iona (McCarthy 2008, 166–167). St. Columba widened considerably the range of entries recorded in the annals, including in particular secular entries relating to Scotland and Northern Britain. The entries may seem scant and fragmentary to a modern reader, but they would most certainly have provided significant intelligence for the allies and patrons of the monastery (McCarthy 2008, 164): therein lies both their value as a source for sixth and seventh century Scotland and their political and geographical bias.

As the author is familiar with both Latin and Ancient Greek, the primary language of these texts, the sources have been examined and discussed wherever possible with reference to their original language.

Whilst all of these sources are flawed by their authors' points of view and aims, they all offer information to compare with the result of the archaeological analysis, especially with respect to the existence of permanent tribal subdivisions; the relationship between Roman

troops and the inhabitants of South-West Scotland; the power and social expectations of native leaders; and the environmental and socio-cultural undercurrents of the centuries here explored.

4. THE ROMAN OCCUPATION

FORTS AND ROADS

The general framework of Roman presence in Scotland has already been outlined in the Literature Review, and detailed accounts of the Roman occupation of Southern Scotland can be found in greater detail than it is possible to cover here in countless other works (for some recent overviews, see Fields 2005; Todd 2007a; Jones 2011 and Collins 2012). This chapter merely highlights the general chronology and geography of the Roman occupation of the study area, before delving into an analysis of the native archaeology.

The main frontier line in the late first century AD period was to the south of the study area, along with the Stanegate frontier (Hanson 2007), whose key western fortification, Carlisle, had already been built by the early 70s (McCarthy 2002b). However, the Stanegate was hardly the only area which saw Roman military operations in this period, since already by the early 70s there may have been at least another military installation deep into Annandale: Milton of Tassiesholm (Clarke 1961).

Construction work for Hadrian's Wall, the southern border of the study area, begun in 122 AD, but it hardly represented the abandonment of Roman military fortifications in Southern Scotland in favour of a fixed frontier. At this moment in time, most Roman frontiers were fluid rather than impenetrable, static borders, and were meant to facilitate oversight and exchange over a wide area beyond the physical frontier line itself (Crow 2007, 117–119). In fact, Hadrianic fortlets abound, especially but not exclusively in modern Dumfriesshire, and material culture and coins dated to the first and early to mid-second century AD are known from the study area, showing a significant degree of interaction between Roman forces and natives, as will be seen below and in subsequent chapters. This interaction culminated under the reign of Antoninus Pius (138 – 161 AD), during which period the frontier line itself was temporarily pushed north, across the Forth-Clyde isthmus, to incorporate the entirety of what is now known as the Borders area of Scotland.

The Roman fortifications from these roughly 150 years of occupation do not only attest to the resourcefulness and genius of Roman military architecture, but may also show that interaction with the natives was not always peaceful. In fact, it has been remarked that the elevated number, uneven spacing, and complex defences of early second century fortlets

in the Annandale and Nithsdale areas, i.e. the region leading north from Carlisle towards Milton and beyond, is unusual within standard Roman practices, which has led to hypothesize that the forces stationed at these sites served both as deterrent and quick response units to hit-and-run attacks: in other words, they were located in a hostile landscape which refused to completely bow to Roman rule (Symonds 2011; Hanson 2012, 72).

This hypothesis is not entirely new, but echoes older theories about a possible uprising which are centred on the fort at Birrens (Birley 1939, 317; Keppie 1989a, 67). Birrens began life as a small and relatively simple installation in the Flavian period (i.e. ca. 60 – 100 AD), after which phase it morphed into a large fort which probably served as the key Roman post beyond Hadrian's Wall in the period ca. 120 – 140 AD (Robertson 1975, 73–78). The Hadrianic fort was dismantled and levelled out during the Antonine period, when a new installation was built slightly to the north, to house the First Cohort *Nervana Germanorum* (Robertson 1975, 78–88, 247). This installation was destroyed by fire, in a manner described as effective but disorganised, probably around ca. 153/4 AD, a date based on an unworn *dupondius* found beneath the street of the next military installation on the site (Robertson 1975, 247, 283). However, it ought to be noted that Robertson, who directed the 1962–67 excavation of the site, remained unconvinced that the destruction event was hostile in nature, and argued that it merely represents the Roman dismantling of the site and the destruction of any resources which may have been re-used by native populations, as was standard practice (1975, 283). Regardless of the circumstances surrounding the destruction of Birrens in the early 150s AD, the possibility of widespread hostility in this area of South-West Scotland at least bears remembering for later discussion.

Returning to the pattern of Roman installations in the study area, it also ought to be said that the actual spread of Roman fortifications and main arteries is uneven: as fig. 6 shows, most of the western coastline is actually devoid of fortifications. This is only partly because this map is introductory in nature and only concerned with the most important features as they are currently understood: most of the western coastline areas do not seem to be majorly reshaped by the Roman military. However, this is not to say that there was no interaction or oversight. It cannot be forgotten that the Romans also had a fleet, which means that, even though we do not know them at present, there had to be several shelter

and resupply points all along the coastline itself at the very least, where regular contact with and oversight of the local population were likely to take place.

The Antonine Wall, as mentioned, was a short-lived frontier, but, despite the withdrawal of the frontier line to Hadrian's Wall, key fortifications, such as the aforementioned Birrens and Milton, remained in operation, perhaps as late as the third century AD. However, the range of occupied fortifications diminished significantly during the third and fourth centuries, until there were almost no active fortifications north of Hadrian's Wall by the end of the fourth century (Southern 2007). By this time, Hadrian's Wall had actually become a frontier as we would characterise it in contemporary terms, i.e. a fixed, defensive and non-permeable line, following the gradual closure of the northern gates of almost every occupied fort along the Wall itself (Collins 2012), probably reflecting the increasing unrest mentioned by Roman sources. How much this unrest actually affected the study area will also be explored in the following chapters.

During their occupation of the region, the Romans did not just build military installations, but also roads, to ease the movement of troops and goods across the landscape. The main arteries linked key fortifications and concentrated in those areas which the Romans felt were crucial to safely and effectively hold Southern Scotland with the least expenditure. There were two main directions of movement: one headed north-north-east, linking Carlisle to Milton and then moving beyond the study area, in the direction of Newstead and Inveresk; and one westward, linking Carlisle to Gatehouse of Fleets, and possibly to other docks somewhere along the coastline of Galloway – no such site has ever been positively identified, though written sources hint heavily at its, or their, existence (Driscoll and Forsyth 2004, 4).

NUMISMATICS

Contact with the Roman Empire is almost inextricably linked with access to the Roman economic market, which can be traced archaeologically through the field of numismatics. Numismatic is a discipline unto itself, which can illuminate discourses on economic markets and social crises, but within the confines of this work, coins will mostly be used as a proxy for dating contact with the Roman world, and to help inform a discussion on the manner of the contact.

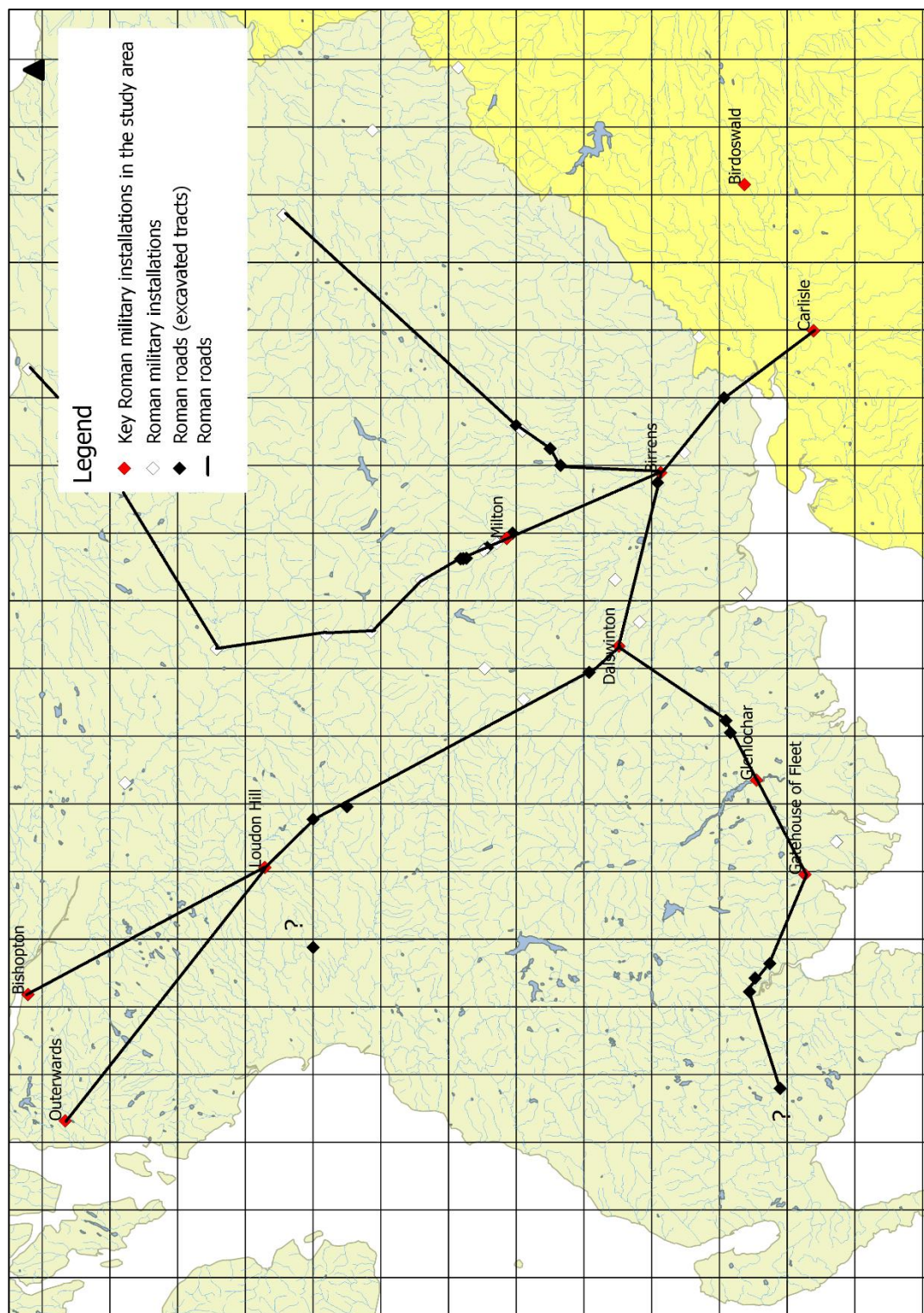


FIGURE 6: ROMAN ROAD SYSTEM IN THE STUDY AREA (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

The database, an overview of which can be found at the end of Appendix 2, is comprised for the most part of stray finds and coin hoards, with small assemblages also recovered from the excavation of native sites. Since the objective of this thesis is to review the social changes of the native population, coins from Roman sites have not been included, nor have coins from the area surrounding Whithorn, for reasons that will be explained in chapter 10. In total, the assemblage from the study area includes 166 original coins, of which 163 are Roman issues. Beyond these, there also is a small number of counterfeits, which will be analysed in later chapters.

These have been subdivided and analysed using the chronological pattern set out by Reece (1995), which consists of 21 periods, from the pre-Claudian through to 402 AD. However, periods 15 through to 18 have been merged together in this analysis, because most of the coin assemblage for Scotland has not been dated beyond the identification of the emperor represented on them, which rendered the precise chronological brackets which he set out in his study meaningless for the study area towards the end of the Roman empire. As can be seen in Table 1, the bulk of the coins are from the first, second and fourth centuries, with almost no issues to be found for the third centuries.

The distribution of first and second-century coins on the ground closely resemble the spread of Roman roads, with the addendum that only about half of the assemblage has precise location records, while the other half only has a parish record (figs. 7-9). The chronological distribution mirrors the advancement of Roman troops within Scotland: Reece 1-3 coins are almost exclusively found in southern Dumfriesshire, whilst Reece 4 coins spread northwards halfway across the coast of the study area. Reece 5 and 6 coins reach the northwards limits of it. Interestingly, Reece 4-6 coins are found throughout the study area, but Reece 7 coins (i.e. Antonine coins) are absent from modern Kirkcudbrightshire.

Coins are a particularly good dating proxy because they were also used as a means to spread news across the Empire, so that their minting at the very least can be dated precisely. On the other hand, coins could remain in circulation for decades. In northern Britain, for instance, many Roman and native sites have preserved Republican and Early Empire coins, because they were still commonly used in the Flavian period, especially up to the governorship of Agricola (ca. 82/83 AD) (Shotter 2000, 2001).

A second issue when considering numismatic data in Britain is the number of collectors' losses, which are mixed in with actual archaeological losses. For instance, within the assemblage of the study area, there is a gold coin from the reign of Alexander the Great (Ecclefechan, 66676), which is almost certainly a collector's loss given the lack of regular contacts between Britain and the Mediterranean at this point. A less drastic example is the *stater* of Bodvoc – a leader of the *Boduni* people, who lived roughly in modern Gloucestershire – found in the Dumfries area. This coin is an outlier, and it is so far out the spread of any other coin from this group (Van Arsdell 1994) that it almost certainly reached Scotland during the modern era.

Roman coins from the Eastern Empire are more problematic to sort in this respect. These coins constitute a small segment of all coins found in the study area and a significant proportion of coins from the late third century, as can be seen in Table 2. Some scholars are of the opinion that most coins from this period, let alone those from oriental mints, are all collectors' losses (McQ Holmes and Hunter 2001, 173). However, a recent appraisal of Roman coins found in England suggests that some amount of contact with the Eastern Mediterranean in the third and fourth century is plausible (Walton 2011, 232–236). It should also be noted that most coins from the third and fourth century are found in hoards: hoarding has its own issues in regards to chronology, as the date of deposition may wildly differ from the date of original acquisition, but if we accept that hoards are likely archaeological depositions, then the Scottish dataset actually fits the wider British pattern. In fact, the near totality of fourth century coins comes from a single hoard recovered in Aird (60765). Most Honorian (i.e. early third century AD) hoards recovered in England are well worn, and in recent years some scholars have proposed that late Roman silver coinage remained in circulation up to the mid-fifth century AD (Walton 2011, 173–174), so third and fourth century issues have been used here as evidence for the analysis of the Early Historic, rather than the Roman, period. There are no significant patterns in the distribution of these coins that merit discussion at this point (fig. 10).

A third problem with the assemblage is one of absence: specifically, in the entirety of the study area (and it may be remembered that all of the issues as listed in Canmore and not recovered from a Roman site are looked at in this section, not just those from the sample area) there are no coins from Reece's periods 10 and 11, that is from 193 to 238 AD, and only three coins in total for the two preceding periods, which cover the years from 161

to 192 AD. A significant drop in the number of issues minted in the late second century is found across all of Britain, with a reprisal in the number of early third century coins happening in Eastern Scotland during the period of the Severan campaigns. Holmes argues that the number of coins from these decades that reached Eastern Scotland at the least is still significant, based on the assumption that all coins within the same hoard were exported at the same time, thus he considers the coins from earlier periods found with hoards containing late second century issues to have been obtained mostly during Reece's periods 10 and 11 (2014, 135).

1	to AD 41	23
2	41 – 54 AD	1
3	54 – 69 AD	6
4	69 – 96 AD	20
5	96 – 117 AD	5
6	117 – 138 AD	17
7	138 – 161 AD	17
8	161 – 180 AD	1
9	180 – 192 AD	2
10	193 – 222 AD	
11	222 – 238 AD	
12	238 – 260 AD	2
13	260 – 275 AD	4
14	275 – 296 AD	6
15, 16, 17 and 18	296 – 364 AD	58
19	364 – 378 AD	1
20	378 – 388 AD	
21	388 – 402 AD	
n/a	unidentified/unidentifiable	7

TABLE 1: ROMAN COINS IN THE STUDY AREA, DIVIDED ACCORDING TO REECE (1995)

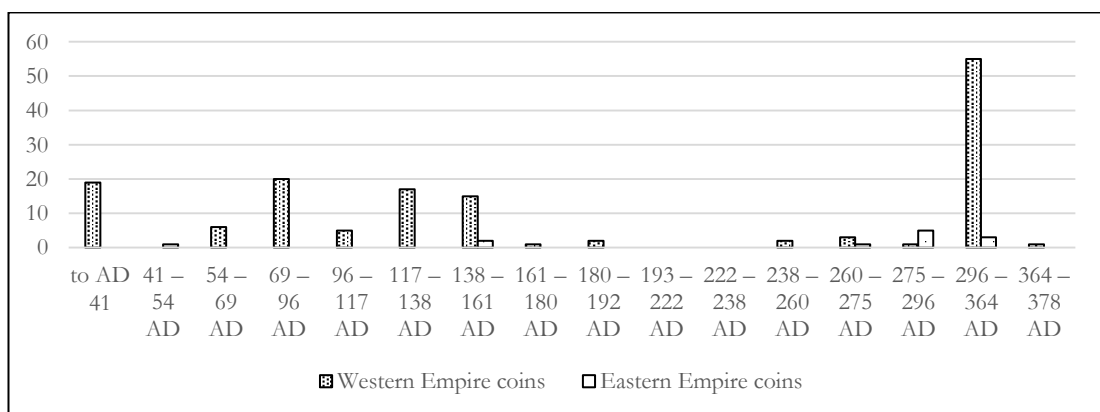


TABLE 2: WESTERN AND EASTERN ROMAN EMPIRE COIN ISSUES FROM THE STUDY AREA

In practice, the number of coins for Reece periods 10 and 11 are significantly lower than in the preceding periods for South-Eastern Scotland, but overall they are significantly higher than the three issues found in the study area. Of these coins, only the example from Mill of Buittle (6499) was recovered close to other coins, both Canmore lists it as a stray find rather than a hoard, which seems to cast doubt on the coins being deposited as part of a single, intentional act. Either the Reece 10 and 11 coins are a direct result of Roman military presence during the Severan campaigns, which did not see much direct action in South-West Scotland, or they are symptomatic of a different interaction from the Roman world towards the western groups.

However, the most important issue when considering coins is their value within the native societies. In the Roman world, coins were both used as currency and to spread news of new emperors and their victories across the Empire. With the exception of Southern England, where coins began being minted sometime after increased interaction with the Roman world, probably as a means to emulate the practice of spreading the effigy of the ruler more than as a means of economic exchange (Haselgrove 1987), coins never became widespread in Northern England or Scotland. If coins were not part of the local culture, this leaves open the question as to what purposes the coins filled within native societies.

The most common answer is that coins, much like exotic foodstuff and Roman metalwork, glass and pottery ware, did not have a monetary value but were used as symbols of favour with the new neighbours, and perhaps in time as symbols of power, especially within groups whose elites were sponsored by the Romans. A recent argument in this sense has been made by Holmes, who pointed out that coin hoards found in settlement sites are unlikely to represent savings, and far more likely to represent some kind of good-luck sacrifice (McQ Holmes 2014, 139). At least one such hoard was recovered in the study area as well (Aitnock, 41205), though whether the deposition took place during the occupation period of the site or at the end is unclear from the report (Smith 1918, 132).

The rejection of coinage as a currency for Northern Britain is usually made on the grounds that the native societies held a different conception of what symbolised wealth (for a recent summary, see Haselgrove 2007, 15). Whilst this certainly holds true for why these societies never developed coinage of their own, it is difficult to rationalize that, despite on-going contact and at least one generation of these societies growing up within the

Empire, if not more as will be explored below, the communities of South-West Scotland never used Roman coins as currency to trade with the rest of Britannia and with the Roman fleets along the coastline. Access to coinage may very well have been limited to the leaders within these societies, and the use of coins as currency may have been limited due to their concomitant value as exotic objects steeped in the reflected value of contact with the Roman Empire, but for the purposes of this thesis, coins will be considered both as exotic metalwork items and as potential currency.

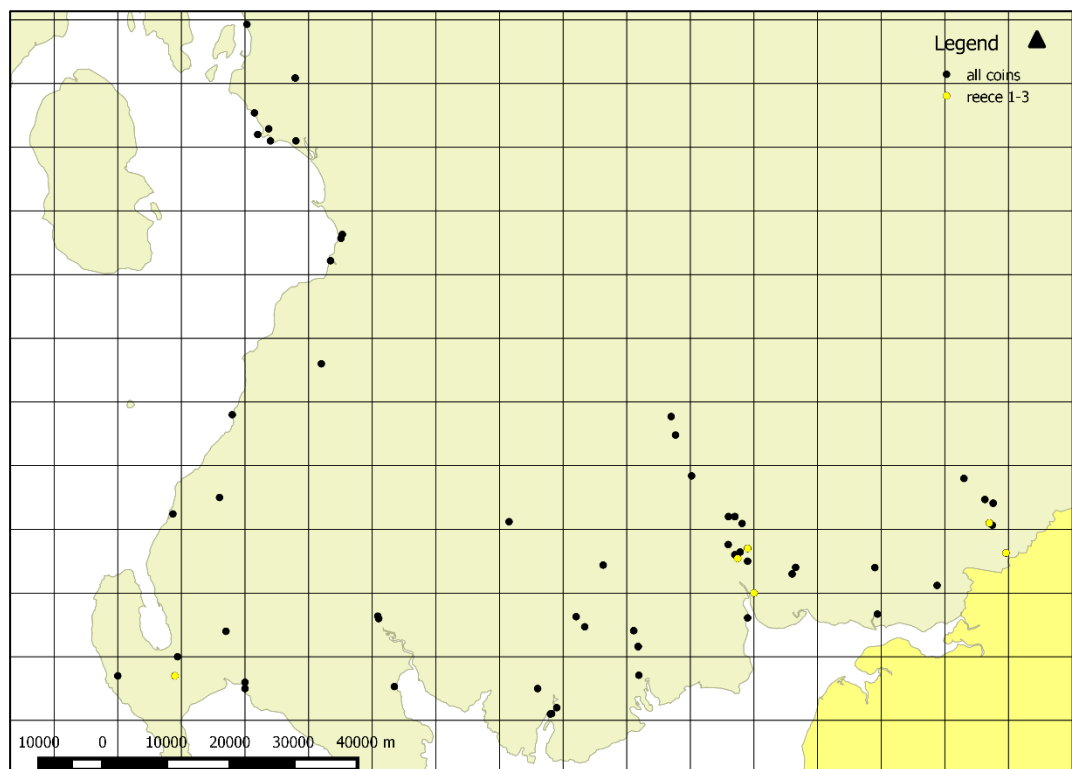


FIGURE 7: DISTRIBUTION MAP OF REECE 1-3 COINS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017.
ORDNANCE SURVEY (DIGIMAP LICENSE))

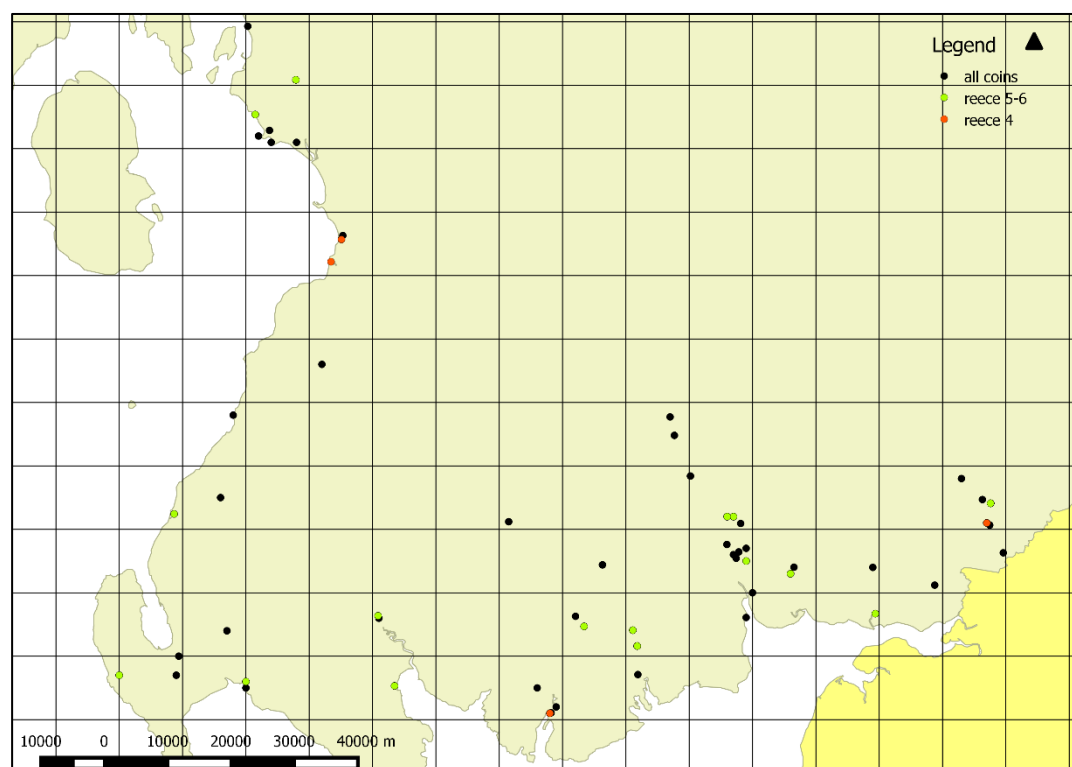


FIGURE 8: DISTRIBUTION MAP OF REECE 4-6 COINS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017.
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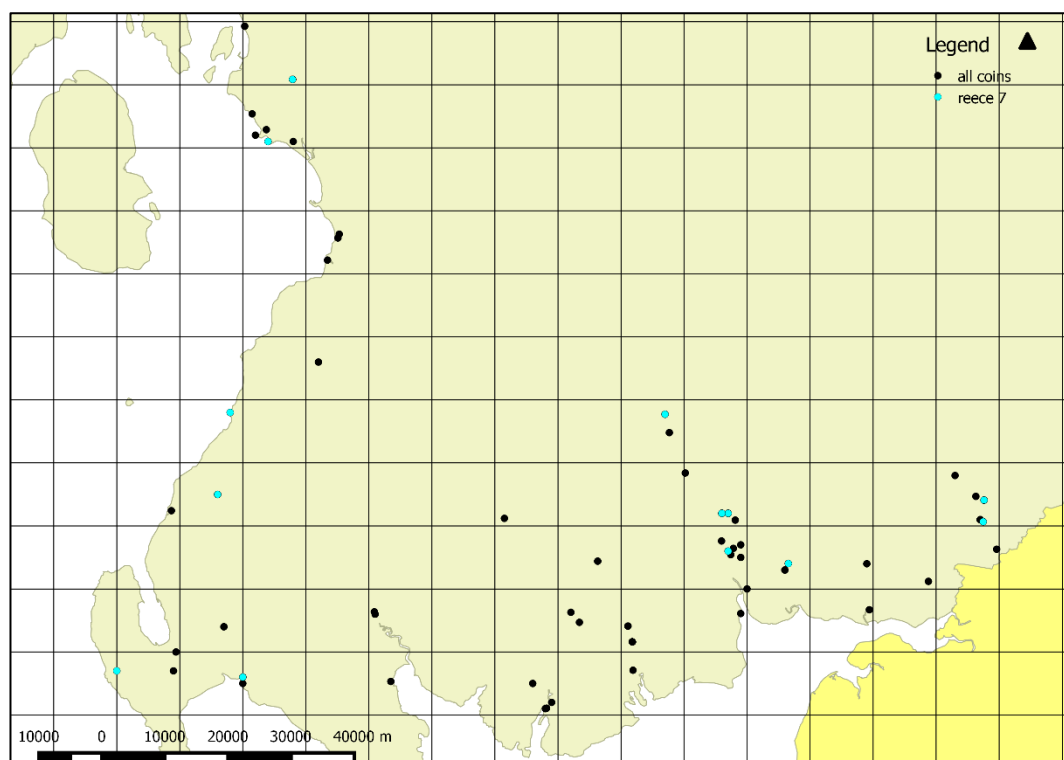


FIGURE 9: DISTRIBUTION MAP OF REECE 7 COINS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

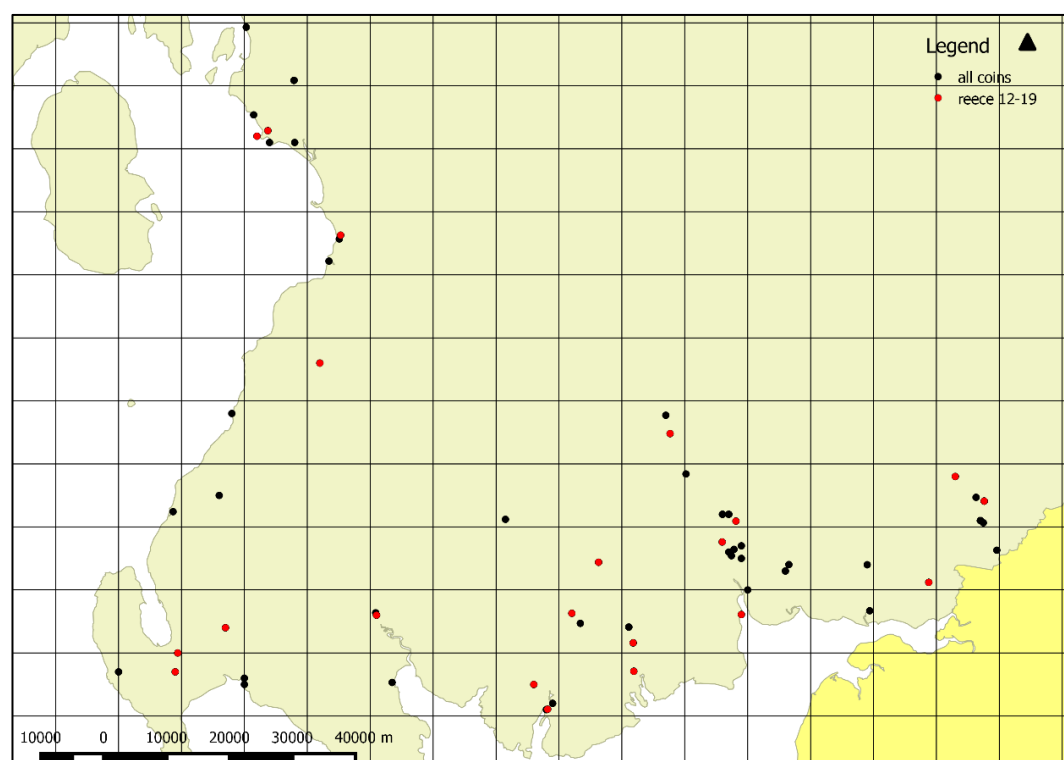


FIGURE 10: DISTRIBUTION MAP OF REECE 12-19 COINS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

5. NATIVE LANDSCAPES IN THE ROMAN IRON AGE

GENERAL PATTERNS

In Southern Britain, the Roman Iron Age covers the period of Roman political control over the area, whether real or nominal: thus it goes from ca. 43 AD, the date of the Claudian invasion, to ca. 400 AD, when the defence of the island, and by extension its administration, became the responsibility of its inhabitants. ‘Roman Iron Age’ is a far more complicated label to use in Scotland. There, the period of direct Roman control traditionally stretches between the Flavian and the Antonine periods: thus, it should end ca. 161 AD, the year which saw the death of Antoninus Pius and the succession as emperor of Marcus Aurelius. It is also likely that the decision of withdrawing the formal frontier line to Hadrian’s Wall was taken before the accession of Marcus Aurelius, since the refurbishment of the forts on Hadrian’s Wall begun ca. 158 AD (Collins 2012, 24). However, as was also discussed in the previous chapter, several forts in Southern Scotland, such as Birrens (Robertson 1975) and Newstead (Hunter and Keppie 2012), remained in use at least up to 180 AD, if not later. In the third century, there was renewed Roman engagement as well, including a possible reoccupation of the aforementioned fort at Newstead.

The decision was made here to consider the re-development of Hadrian’s Wall, rather than the occupation date of individual forts, to chronologically subdivide the centuries of the Roman Iron Age in the study area. Thus the period up to ca. 160 AD is here referred to as the Early Roman Iron Age. The Late Roman Iron Age, i.e. the period after 160 AD, ends for the purposes of this study, ca. 350 AD: outposts north of Hadrian’s Wall had been abandoned approximately two decades previously, and, as seen in the Literature Review (pp. 19 – 32), around this time there is growing evidence that the military units manning the wall had become local units rooted in the local communities (Collins 2012, 24, 108–110).

Beyond the chronological period just defined, the main focus of this analysis is settlements, which are here defined as either enclosed or unenclosed area of human habitation. As such, there may be differences in the denomination of sites between the thesis and Canmore, since enclosures with remains of huts or roundhouses or other buildings have been considered as settlements. On the other hand, enclosures may be the

only remnants of actual settlements, but they may be simply enclosures for farming or agricultural purposes. In the absence of specific data or photographic imagery proving otherwise, enclosures will not be considered as settlements in the following discussion.

Looking at the distribution map for possible Iron Age settlements (fig. 11), the first pattern to be immediately apparent is the uneven distribution of some settlement types. This is not in itself a new pattern to be noticed. In fact, the different spread of some settlement types such as duns has already served as the basis for regional divisions of Scotland, most famous of which is Piggot's *Scheme for the Scottish Iron Age* (1966). Within the study area, which represents only the selected map tiles and comprises 25% of the total area, duns are mostly concentrated in the northern tiles and on the islands, with only two outliers in the sampled tiles in the southern half of the region. Beyond monumental architecture, however, there is a distinct variation in the distribution of rectilinear enclosed settlements within the selected map tiles. These settlements are extremely common in the south-eastern half of the assessed map tiles, less common in the south-western ones, and absent in the northern tiles – the same region where monumental architecture is more common. There appears to be, therefore, three areas, based on the assessment of the selected map tiles: one defined by the abundance of rectilinear enclosed settlements – which will be called Area 1; another defined by the prevalence of Atlantic architecture – or Area 3; and a third transitional zone, where neither type is prevalent but both are present – or Area 2 (see fig. 12).

RECTILINEAR ENCLOSED SETTLEMENTS

To evaluate the validity of this subdivision, it is necessary first to take a step back and look in detail at these settlement typologies, beginning with rectilinear enclosed settlements. These are strictly enclosed settlements, i.e. a single homestead or a group of houses, with or without outbuildings, within a space clearly demarcated from the 'outside'. This demarcation can vary: a ditch, a bank or rampart, a palisade, a wall, or a combination of these elements. The common denominator of these settlements is that the shape of the enclosure is rectilinear, i.e. a shape with corners. A typical example of this type of settlement is Newhall Farm (67226), NY28 (fig.13): this is an unexcavated subrectangular settlement enclosed by a massive ditch and bank, located close to another curvilinear settlement which it either pre- or postdates.

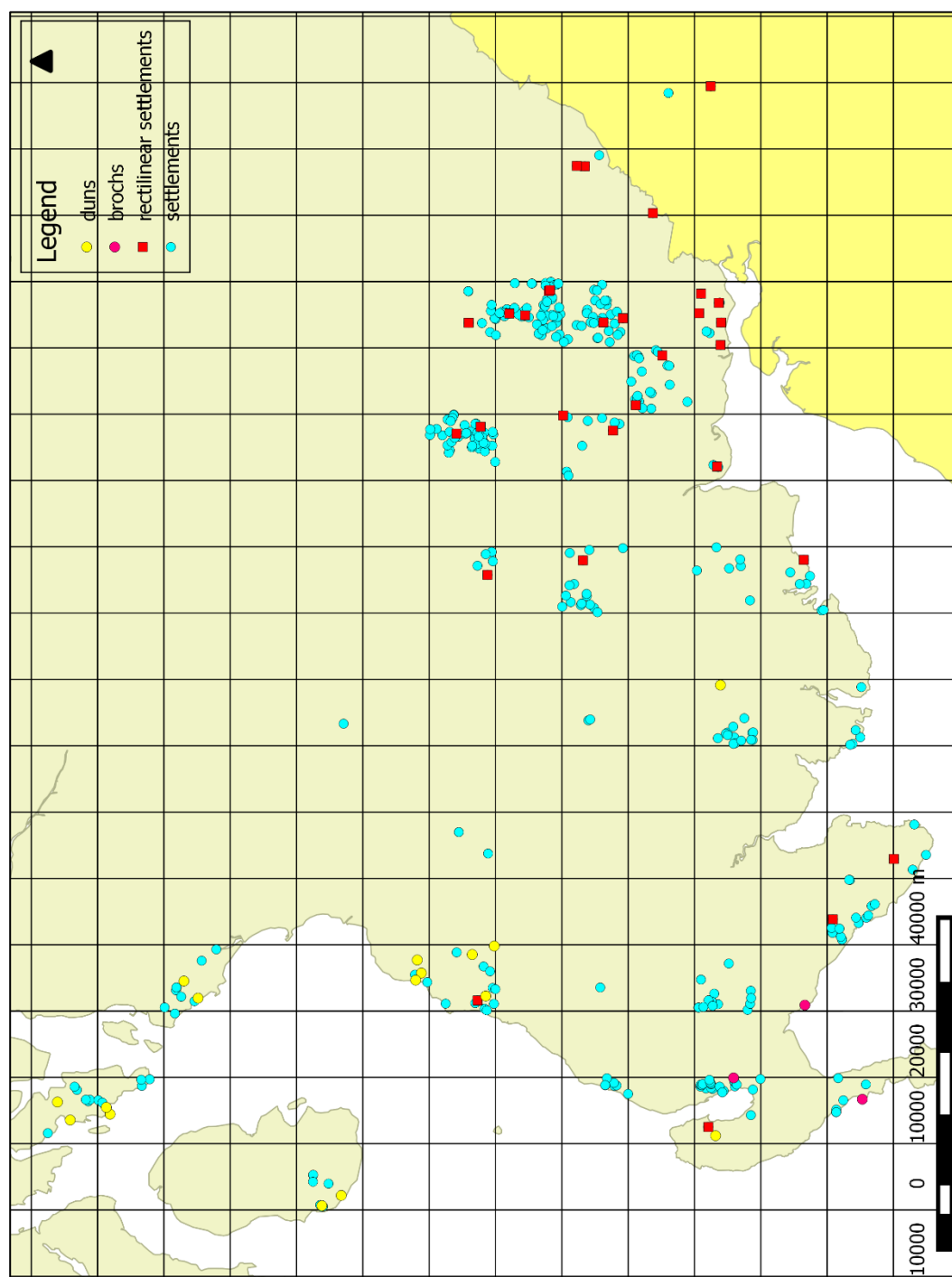


FIGURE 11: GENERAL DISTRIBUTION MAP OF POSSIBLE IRON AGE SETTLEMENTS IN THE SAMPLE
 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

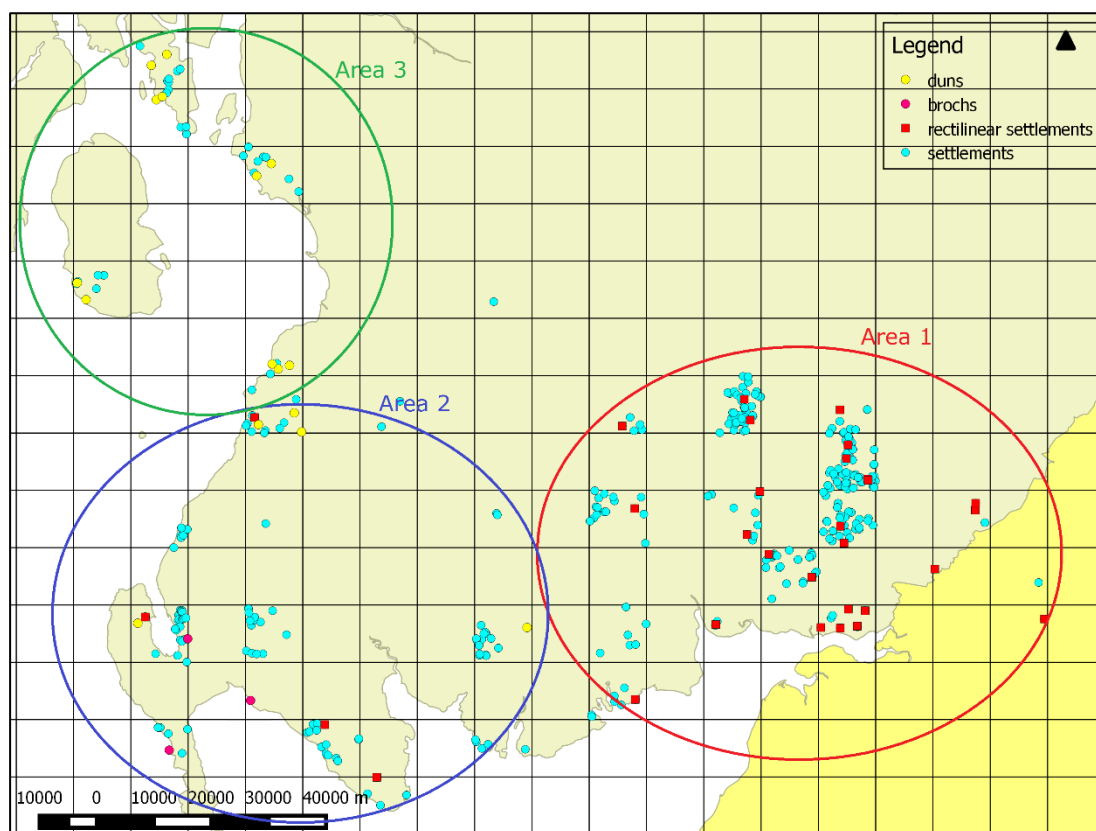


FIGURE 12: AREAS 1, 2 AND 3 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

As can be appreciated from Tables 3 and 4, both the shape of this site and the type of enclosure are the most common among rectilinear enclosed settlements in the sample: the total percentage of ditched rectilinear enclosed settlement is, in fact, ca. 43%, which is a significant proportion of this site category.

However, it is also necessary to point out that the number of rectilinear enclosed settlements is only a fraction of the number of the far more common curvilinear enclosed settlements, as can be seen in table 5. The low percentage of rectilinear enclosed settlements in the South-West is echoed in Cumbria, where an aerial photography campaign during the drought of 1976 revealed hundreds of new sites in a previously empty settlement landscape (Jones and Walker 1983, 185–87; 195): the quantitative relationship between curvilinear and rectilinear does not seem, therefore, to be an accident of the sampling technique, though it ought to be noted that the majority of these sites have never been explored or dated. The limited assessment of the three map tiles in Cumbria as part of the present study only added a single rectilinear settlement and two

open settlements, which does not quite confirm the pattern from the 1980s areal photographic survey.

The next question concerns the significance of curvilinear against rectilinear architecture. This question, in the absence of written sources or more extensive excavations, will perhaps never be conclusively answered; however, there are three possible interpretations:

- i. The first explanation is that a rise in social stratification led to the desire to express one's status visually with a different settlement type. It is largely a simplistic explanation, but times of social change have been known to fuel changes in the architectural expression of an individual culture (Bradley 2012, 117–119).
- ii. A second possibility is that of an evolution or shift in the cosmological belief of the local communities, which resulted in the creation and slow adoption of a rectilinear archetype over the older curvilinear one. Across prehistoric Europe, cosmological issues have in fact been theorized as the overarching reason why different cultures favoured curvilinear or rectilinear spaces (Bradley 2012, 41–42).
- iii. A third scenario is that of external influences. If the settlements were created either just before or during the Roman Iron Age, the most obvious influence would be the Roman world: Roman architectural and spatial organisation, in fact, revolves around rectilinear spaces.

None of these possible explanation needs to be exclusive of the others: social changes are difficult to disassociate from cultural changes, which in turn may be fuelled by external contact. However, the last scenario, in particular, begs the question of the time period in which the shift towards rectilinear enclosed settlements happened.

The Cumbrian survey mentioned above seems to suggest that most of the enclosed settlements were Roman Iron Age, with a boom in the first to the fourth centuries AD due to the food requirements of the army (Jones and Walker 1983, 187–191). Following this scenario, both curvilinear and rectilinear architecture co-existed within the same time period. In the most recent appraisal of the same evidence, McCarthy notes that at least some of the settlements may have earlier phases, but overall agrees with the same Roman Iron Age interpretation put forward by Jones and Walker (McCarthy 2002b, 44–46, 104). However, the agricultural boom hypothesis remains unproven, since Cumbria, much like the study area, is an under-researched region and the discovered sites remain unexcavated, and thus undated, for the most part (McCarthy 2002b, 13–20).

A more recent study from Northumbria, however, points out that the emergence of rectilinear spaces is dated to the Early Iron Age rather than the Roman period, with most of them remaining in occupation for the duration of the Iron Age. The authors of this study argue that the settlements have a likely abandonment date of ca. 120 or 140 AD, and they tentatively link their abandonment, rather than their creation, to changes in the spatial organization of the *Britannia* province following the militarization of the landscape south of Hadrian's Wall (Hodgson, McKelvey, and Muncaster 2012).

Considering that the shift from Bronze Age into Iron Age is often thought to be a period of crisis (Cunliffe 2013, 291–293), the Early Iron Age may in fact be a likely candidate for the emergence of this settlement type in the study area, but the Late and Roman Iron Age, in the absence of secure widespread dating, cannot be discounted as a period of expansion for this settlement type. In other words, the two results of the old Cumbrian survey and the new Northumberland emergency excavation results need not be completely exclusive.



FIGURE 13: AERIAL PHOTOGRAPH OF NEWHALL FARM (©RCAHMS, SC380420)

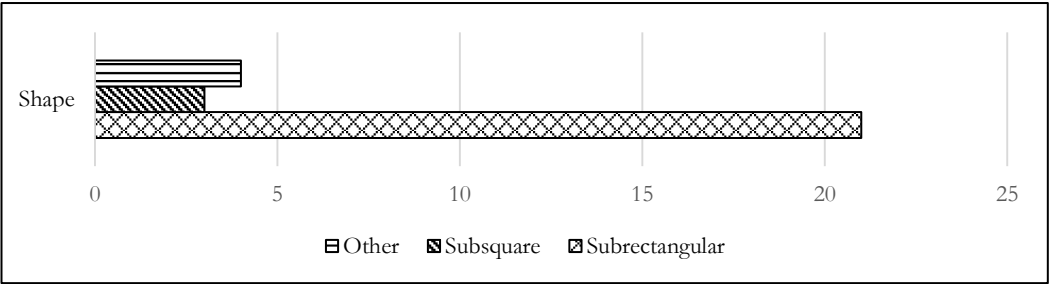


TABLE 3: MORPHOLOGY OF RECTILINEAR ENCLOSED SETTLEMENTS

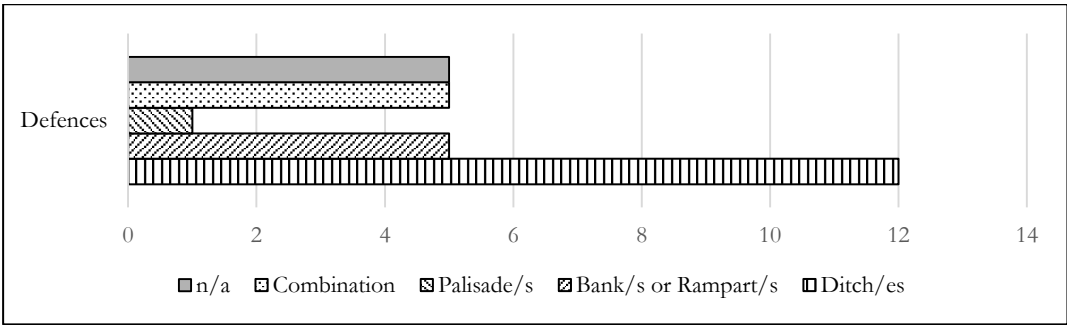


TABLE 4: TYPE OF ENCLOSURE OF RECTILINEAR ENCLOSED SETTLEMENTS

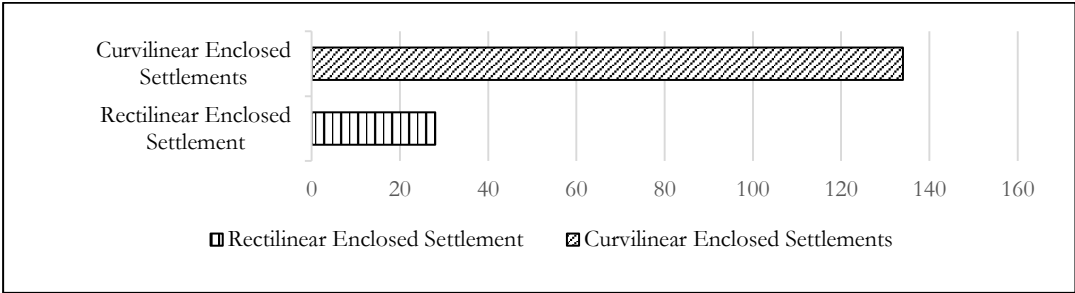


TABLE 5: PERCENTAGES OF RECTILINEAR AND CURVILINEAR ENCLOSED SETTLEMENTS

For the purposes of this thesis, both theories will be challenged as explanations for the South-West Scottish data in the next chapter.

Beyond the issue of dating these settlements, their low percentage compared to the more common curvilinear enclosed settlements, however, reinforces the possibility that their residents may, in fact, have been making a definite statement in social or cultural terms. Again, the Northumberland study authors suggest on the grounds of the known data for the Iron Age farming landscape and the spacing of the rectilinear settlements that these settlements house only a portion of the population, probably the elite (Hodgson, McKelvey, and Muncaster 2012, 209–211).

SUBSTANTIAL HOUSEHOLDS: DUNS AND BROCHS

The morphological label of duns and brochs hides the complexity of these particular types of substantial houses, which are not always distinguishable from each other in the absence of extensive remains. At most basic definition, they both are curvilinear structures for human habitation with thick stone walls. In some cases, there is a gallery between the outer and inner walls, which may or may not have held a staircase to an upper level. When

this feature is present, the structure is referred to as a ‘galleried dun’, or sometimes a broch, depending on the surveyor’s preference. Irrespective of the specific morphology of each example of these structures, both would have made a significant impression on everyone approaching them (Romankiewicz 2016). This fact, coupled with the recognition of their household function, earned these buildings the label of ‘substantial houses’ in the 1990s (e.g Hingley 1992).

However, it needs to be noted that not all duns and brochs served a domestic function. Some of them were intended to serve not as dun houses but as dun forts, and share many of the features of other non-dun hillforts in Northern England and Scotland. This diversity in function is also reflected in the study area, and specifically in Area 3, where both types are present (table 6). There, all of the sample tiles hold more than one example of a dun, and while some of these duns are heavily fortified, other examples show little to no care for defence. A good example of a non-defensive dun is Dun Burgidale (40300), NS06 (fig.14), which is associated with a stock-control enclosure, suggesting that the main activity of their dwellers was stock-raising, and is otherwise unenclosed. An example from the opposite end of the spectrum is Coal Hill (41013) in NS24 (fig.15), a dun encased within a multivallate, walled and rectilinear defence system.

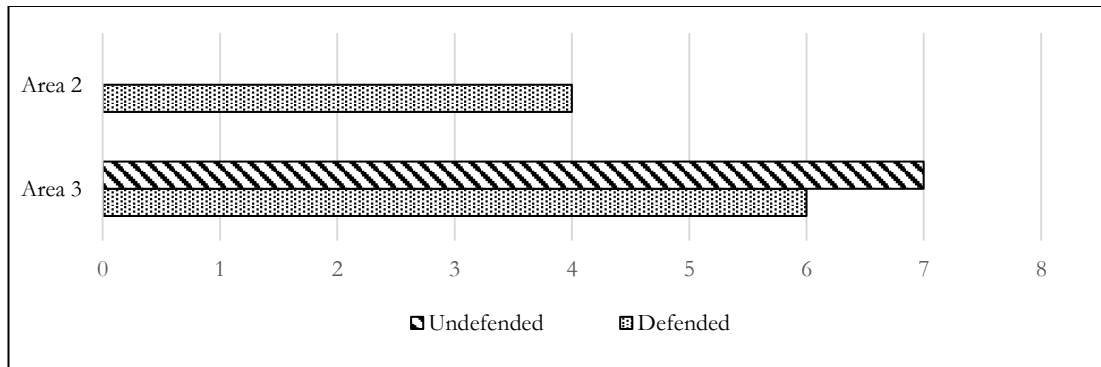


TABLE 6: DEFENSIVE OUTWORKS OF SUBSTANTIAL SETTLEMENTS IN AREAS 2 AND 3

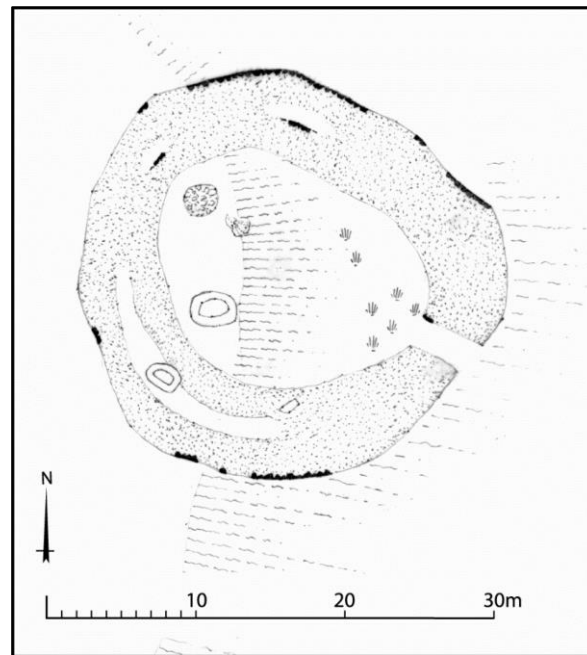


FIGURE 14: PLAN OF DUN BURGIDALE (©RCAHMS, DP240531)

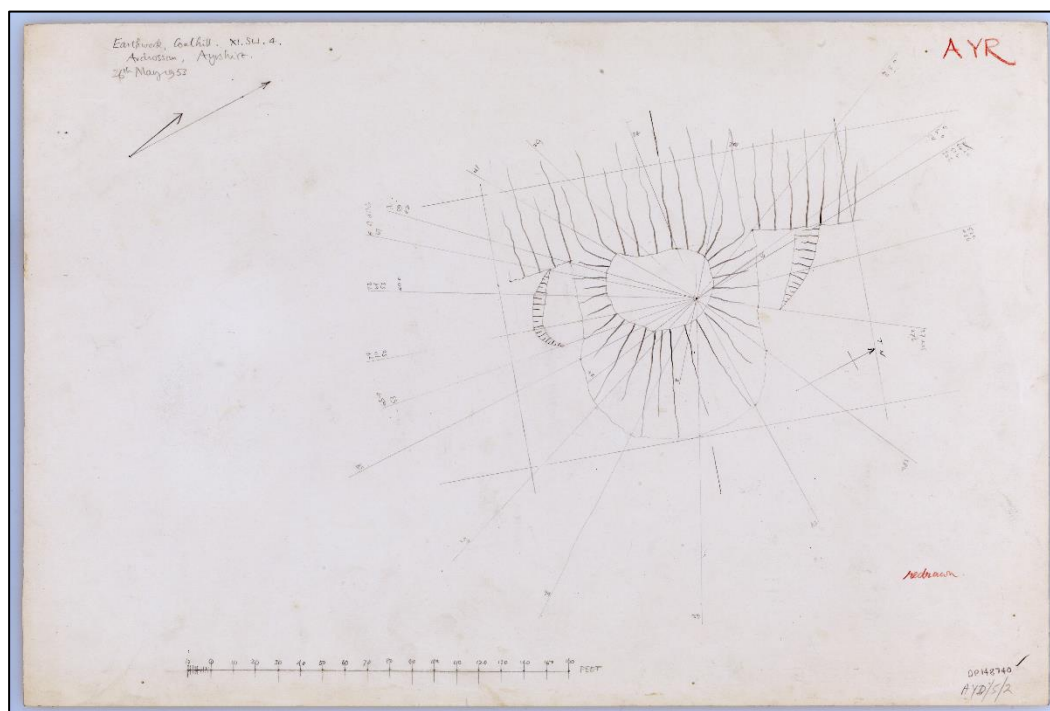


FIGURE 15: PLAN OF COAL HILL (©RCAHMS, DP148740)

In Area 3, where the only two brochs of the selective sample study area are located, these substantial houses also have some sort of outworks. Doon Castle, Ardwell (60487), for example, is located on a promontory which can only be accessed through a natural causeway, and the approach to the site is also protected by a wall, suggesting that this was not a mere household, but either a dun fort or a dun fortified house.

In terms of chronology, in the Atlantic area, these structures are significantly long-lived ones, with the first examples emerging in the Early Iron Age and the latest being built in the Roman Iron Age or even the Early Historic period (Armit 1990; Hingley 1992, 12–17; Mackie 2002). The same broad chronology may very well apply to substantial houses in the study area: for instance, Dun Scalpsie (40254), NS05, is thought to have been built probably during the Early Iron Age period, and then remodelled at least once, (Geddes and Hale 2010, 21–27), whilst Teroy (60815) has yielded Roman pottery consistent with first and second century AD types (NMS, accession number X.GA 928).

To return to the original question of this section, it has been noted that both rectilinear enclosed settlements and substantial households were in use during the Roman Iron Age, that subtle differences in architecture can reflect social differences, and that at least the latter settlement type is not morphologically homogenous in both areas 2 and 3. Therefore, the analysis of this period will follow the tripartite subdivision set out in fig.12: Area 1, characterised by the relative abundance of rectilinear enclosed settlements; Area 3, characterised by the relative abundance of substantial households, defined as brochs and duns; and Area 2, characterised by occasional presence of both rectilinear enclosed settlements and defended/fortified ‘substantial houses’, including crannogs.

AREA I

THE LONG IRON AGE: A STRUCTURED LANDSCAPE?

The general assessment of the sample study area has already presented the key feature of the landscape of Area I: rectilinear enclosed settlements, i.e. settlements with rectilinear enclosures, of varying age from the Early Iron Age onwards, with a potential boom in the Roman Iron Age. Looking at these settlements more closely, a second pattern emerges: their locations in the landscape seem to be oddly regular (fig. 16). The seemingly even spacing of this settlement type, whilst not before noted for the South-West specifically, is not new: Jobey wondered about the pattern for South-East Northumberland at the time of the first surveys (Jobey 1966; Hodgson, McKelvey, and Muncaster 2012, 184), and the notion of some kind of settlement planning persisted well into the current millennium.

ArcGIS analysis has confirmed the possible presence of consistency in the spacing of these settlements: in all the sample tiles where more than one example of rectilinear enclosed settlement is present, the distance between the closest two such sites is around three kilometres, eight kilometres, or almost non-existent (table 7). For the purposes of the current discussion, the settlements located around the three kilometres mark will be termed Group A; those located further away will be referred to as Group B; and those spaced closer together will be referred to as Group C.

Group A settlements are by far the most common couplets of rectilinear enclosed settlements, even excluding the five settlements in NY26, the tile with the highest number of rectilinear enclosed settlements within the sampled study area. The distance between these settlements could be covered, in fair weather conditions, in less than an hour on foot, but it is otherwise unremarkable by itself. It becomes interesting, however, in relation to Roman distances. The basic unit of Roman length is the *stadia*, or 185 metres; a Roman mile, or *mille passus*, contains eight *stadia* and is thus 1480 metres; therefore two *milia* equal 2960 metres (Castiglioni and Mariotti 1996, 2132): just under the approximate distance of 3000 metres between Group A settlements (table 8).

In addition to the similarity between Group A distances and Roman measurements of space, Group A settlements are also more common along stretches of Roman road. It could then be supposed that Group A settlements might be not just Roman Iron Age,

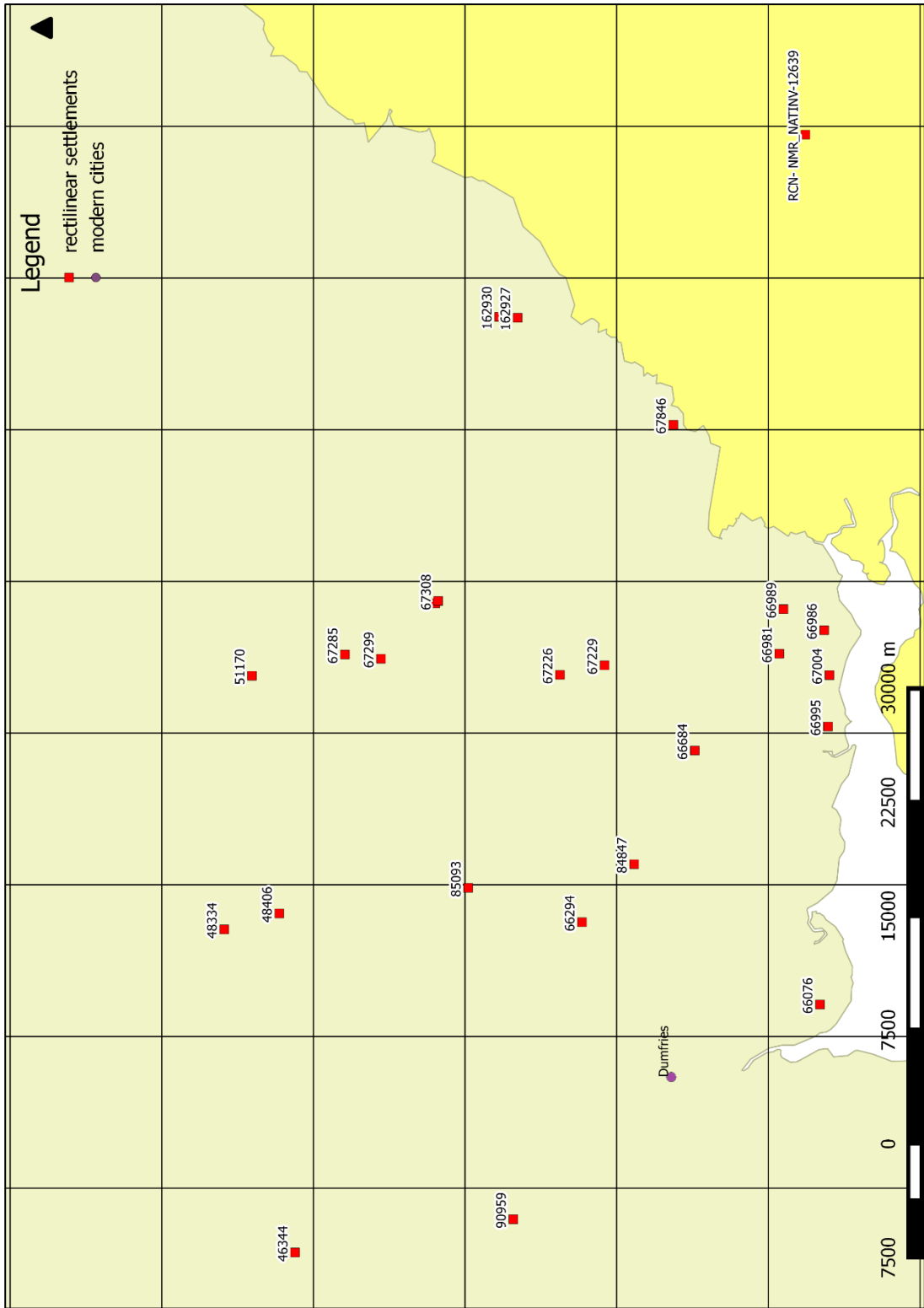


FIGURE 16: RECTILINEAR ENCLOSED SETTLEMENTS IN AREA 1 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

but perhaps sponsored and planned by the Romans themselves. However, the tenability of this proposition relies on several different factors, including the homogeneity of Group A settlements and the reliability of the archaeological data. Let us begin the analysis by looking at the settlements themselves (see fig. 17 for a distribution map), to establish whether they can stand together as a subgroup. References for each site are available in the gazetteer. The Group A settlement sites included here as rectilinear enclosed settlements are broadly defined as having at least one angled corner; however, the sites included are not all strictly rectilinear in a narrow definition, some are triangular or have curvilinear elements to their enclosure.

Tile NY26 holds five Group A settlements:

1. Calvertsholm (66989): this is a trapezoidal enclosed settlement, which contains at least two roundhouses. It is enclosed by a ditch and a bank, and there are further external non-defensive outworks.
2. Broats (66981): this is, once again, a trapezoidal enclosed settlement, delimited by a ditch and surrounded by further non-defensive outworks.
3. Woodfield (66986): this is a subrectangular enclosed settlement, defined by two ditches. There are external outworks which the RCAHMS surveyors have compared with droveways.
4. Hecklegirth (66995): this is another subrectangular enclosed settlement, containing two hut circles within a ditched perimeter. Here too droveways-like outworks were noted during surveys.
5. Dornock (67004): this is a subrectangular settlement containing a single hut circle.

Tile NY28 contains only two Group A settlements:

1. Newhall Farm (67226): this is a multiphase settlement. The phase relevant to this discussion is the second and last one, when the settlement enclosure, consisting of a ditch and bank, was reshaped from curvilinear to subrectangular, among other changes.
2. Birrens Hill (67229): this is a subsquare settlement enclosed by a ditch and bank system.

Tile NY29 contains four examples:

1. Bessie's Hill (67299): this is a subsquare to curvilinear enclosed settlement which contained at least seven roundhouses. It was enclosed by a ditch and bank.
2. Shiel Burn (67307): this is subsquare enclosed settlement, containing six house scoops. It was enclosed with a ditch and bank as well.
3. Shiel Burn (67308): this is a subsquare enclosed settlement enclosed by a ditch and bank combination.
4. Eskdalemuir (67285): this is a subsquare enclosed settlement with three house scoops, enclosed by a ditch and bank

Tile NT00 contains another two Group A settlements:

1. Hillhouse Plantation (48334): this is a multiphase site where the relative chronology between the different phases is unclear. The phase relevant to this discussion consists of a triangular-shaped enclosure containing a hut platform.
2. Beattock (48406): this is a trapezoidal enclosed settlement, associated with a subrectangular palisaded enclosure and earthworks consistent with cattle control and movement.

Of this subgroup of settlements, Calvertshom, Broats, Hillhouse Plantation and Beattock are potential outliers (see table 9), since they are the only settlements in the groups to be morphologically different. Beyond these four possible outliers, the general character of these enclosed settlements is similar. The manner of the enclosure, where noted by surveyors, is almost always a ditch and bank system. External non-defensive outworks are also attested in 38% of these sites.

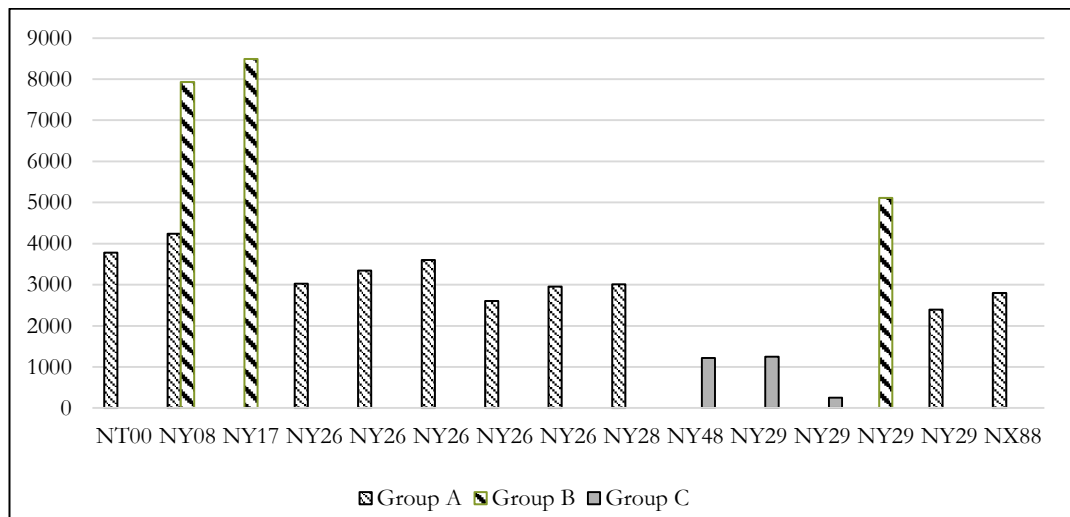


TABLE 7: DISTANCES BETWEEN RECTILINEAR ENCLOSED SETTLEMENTS IN THE SAMPLE TILES



TABLE 8: COMPARISON BETWEEN DISTANCE OF GROUP A SETTLEMENTS AND TWO MILIA

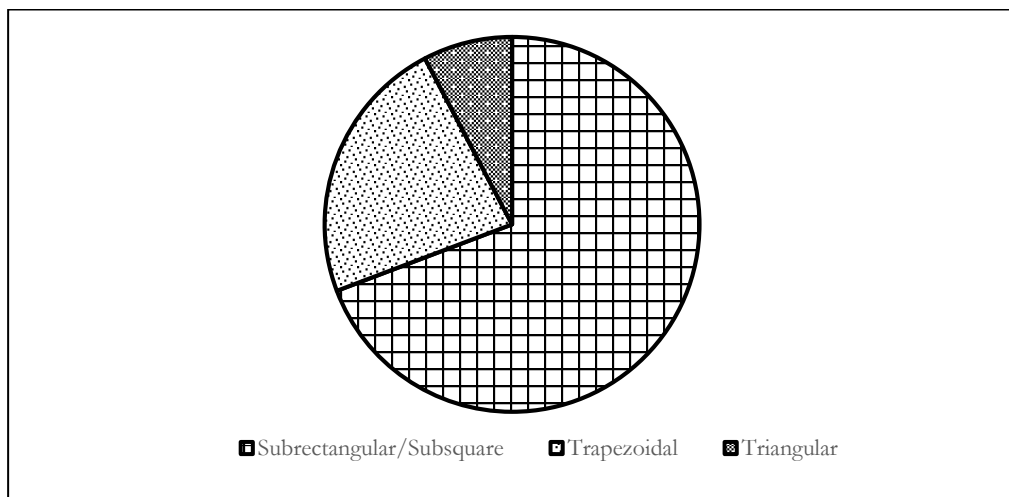


TABLE 9: MORPHOLOGY OF GROUP A SETTLEMENTS

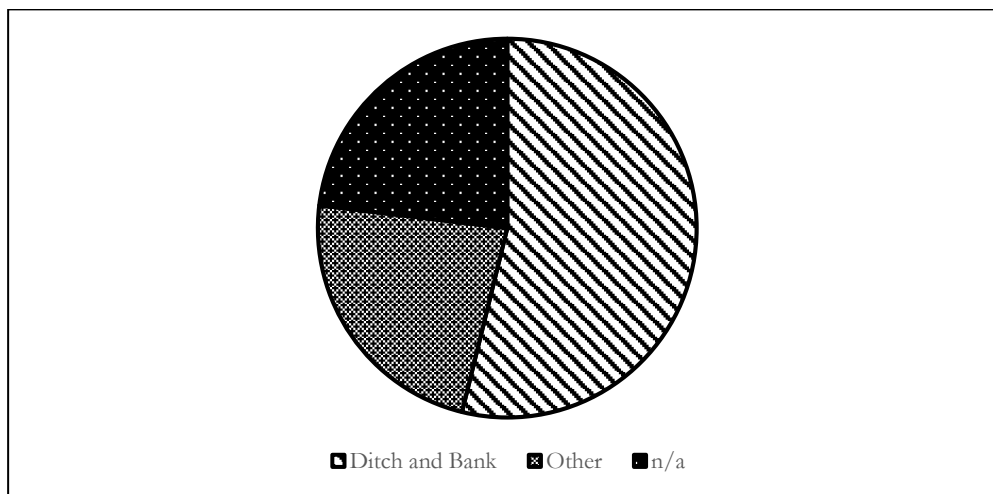


TABLE 10: ENCLOSURE TYPE OF GROUP A SETTLEMENTS

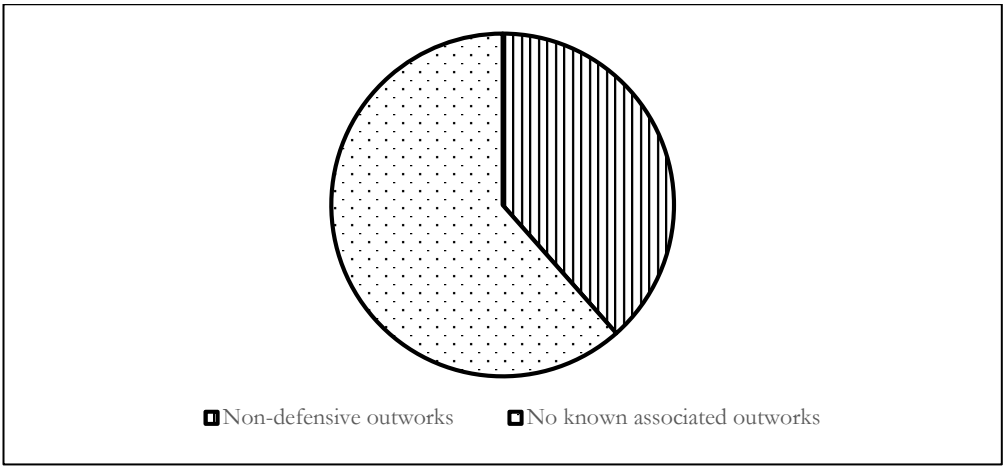


TABLE 11: GROUP A SETTLEMENTS AND NON-DEFENSIVE OUTWORKS

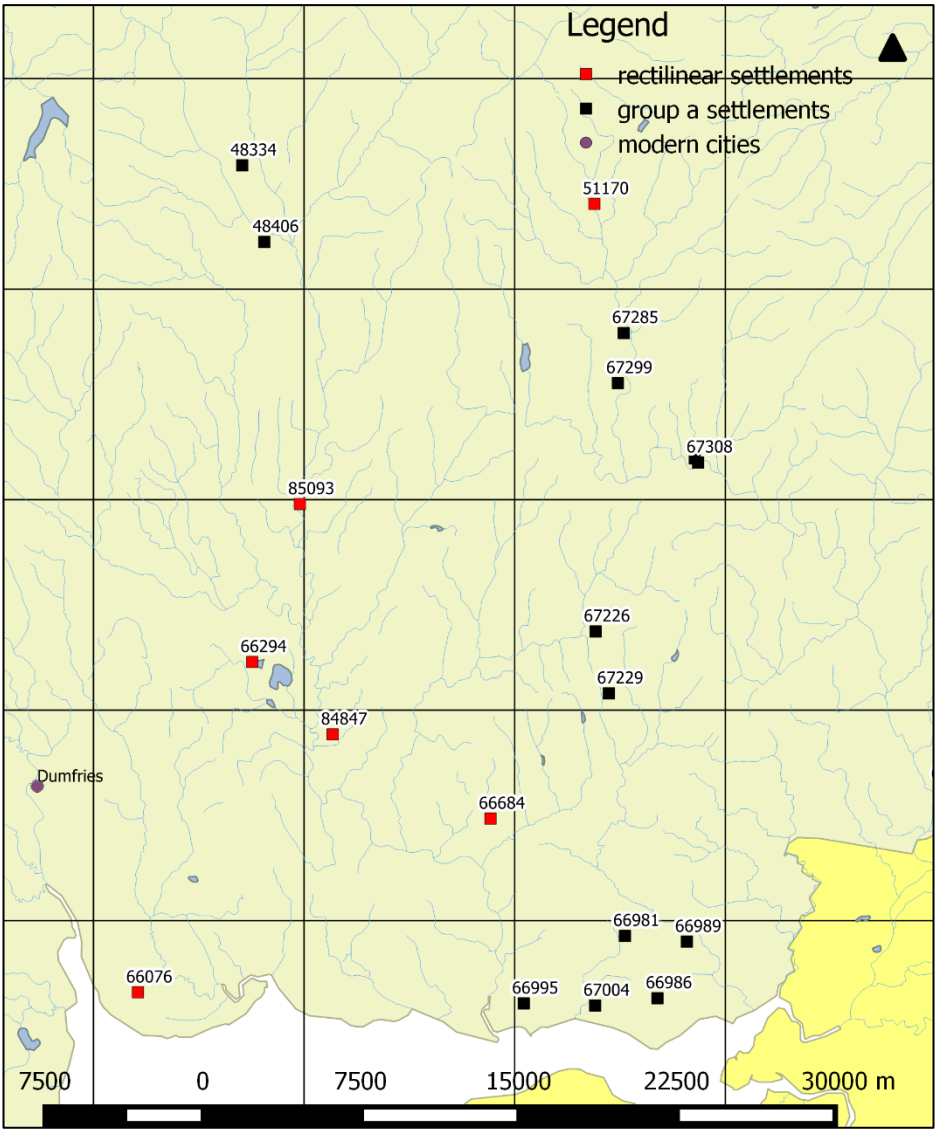


FIGURE 17: DISTRIBUTION MAP OF GROUP A SETTLEMENTS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

Something that all of the Group A settlements share is the limited extent of information on them: none has been the subject of an excavation project, with the partial exception of Beattock (48406). The latter has been partially investigated during rescue excavation projects due to the expansion of the neighbouring village, but nothing dateable was recovered (Cook 2005). Beyond the landscape sample, there is an excavated settlement which, at its basic description, fits the morphological profile of a Group A site very well: Carronbridge (fig. 18, 65197).

This native settlement consists of a multi-phase square double-ditched enclosure, containing six ring-groove buildings (Johnston et al. 1994). Buildings 1, 2, 3, and 6 are the best defined, and stratigraphic considerations impede their synchronic occupation, while Buildings 4 and 5 have been heavily truncated by ploughing and were not traced in their entirety (Johnston et al. 1994, 245–250). The settlement is located in an area with a long history of human presence, with Bronze Age burials and pits located within and around the site. There also is another subrectangular enclosure, which stratigraphically predates the neighbouring Roman temporary camp, to the north of the settlement, though it is unclear whether this was another settlement or if it served another purpose (Johnston et al. 1994, 239–266). In terms of economic activities at the site, it was remarked in the report that the soil from the pits and sunken features was rich in animal bone remains, suggesting a focus on animal husbandry (Johnston et al. 1994, 252).

Radiocarbon dates were obtained for Buildings 1, 2 and 6, with consistent results: Building 1 has the least precise date range, 140 – 415 AD (calibrated) (Johnston et al. 1994, 245), while Building 2 has a more useful calibrated *ante quem* date of 55 BC – 210 AD (Johnston et al. 1994, 246). Building 6 has consistently yielded calibrated dates in the first two centuries AD from both a beam and its hearths (Johnston et al. 1994, 250). The relationship between one of Carronbridge's associated enclosures and a cobbled surface, tentatively interpreted as a Roman road, may shed light on the precise window of occupation in the Roman Iron Age, but neither of these features was explored during the excavation (Johnston et al. 1994, 259, 261).

The settlement at Carronbridge may, therefore, be dated to the Roman Iron Age, and, tentatively, to the first and second centuries AD, although it may have been occupied slightly longer. If the morphological similarity is an indication of similarity in date, then

by extension the Group A settlements could very well be Roman Iron Age in date, as Jones and Walker's reading of the settlement landscape evidence from South of the Solway had hypothesised (1983). In as much as it viable to date a group of settlements from the data of one, this dating would indicate a contrast to those of the results from the Northumberland survey (Hodgson, McKelvey, and Muncaster 2012), on the opposite side of Britain, at least in terms of their foundation date. Interestingly, however, the proposed dates for the end of the occupation period are the same.

The issues in the reliability of dating for these settlements bring to the forefront the final and major issue in this brief description: the reliability of the archaeological data for the region. This question has already been addressed to some degree in the Methodological



FIGURE 18: AERIAL PHOTOGRAPH OF CARRONBRIDGE (©RCAHMS, SC357272)

section (pp. 33 – 36) and its answer is that the archaeological landscape is, overall, incomplete. However, incomplete is not synonymous with wrong, and given the similarity in the morphology of all of the possible Group A sites, the existence of any pattern is worth exploring in more detail.

The absence of burnt mounds from the tiles under scrutiny might imply that the pattern is likely to be inaccurate, but Area 1 has been the subject of intense scrutiny for the RCAHMS monograph on Eastern Dumfriesshire (1997). In this monograph, two of the tiles in which the pattern occurs, NT00 and NY29, were used as case studies to offer a clear understanding of the accuracy of the archaeological landscape as reconstructed for the area (1997, 57 – 93). The surveyors noted how the modern landscape of the former, NT00, is the product of the improvement period, which has erased most traces of all prehistoric and mediaeval settlements on agricultural terrains, with sites surviving primarily on pasture lands which have not been converted to plantation (1997, 74). As for the latter, the surveyors have noted that the advancement of plantations, which cover most of Upper Eskdale, i.e. NY29, have erased almost all traces of non-defended settlements, and that the archaeological landscape can only be seen where there are gaps between the plantations (1997, 86, 93). In both cases, however, the surveyors expressed confidence in the archaeological landscape which has survived, though they were talking in terms of diversity of sites rather than specific patterns.

If we look at the maps for these sample tiles, respectively fig. 63 (p. 280) and fig. 83 (p. 300) in Appendix 1, the different survival patterns can be seen in the specific spread of monuments, which in both tiles cluster for the most part on higher ground along the main river basins. The settlement record of these tiles highlights further how most of the evidence is, in fact, missing, thus leaving wide swaths of the landscape where the pattern here suggested may be confirmed or disproved. Where the evidence survives fully within these tiles, the two-*milia* pattern occurs in two out of four possible couple of rectilinear enclosed settlement, with the further *caveat* that, of the two non-Group A couples, one of them, located in tile NT00, is highly unlikely as it would occur between two settlements on different river systems, travel among which would not have easily occurred in a straight line. Overall, therefore, the landscape history of the region, while incomplete, does not discount *a priori* that this pattern is possible.

Within Roman archaeology, the first thought likely to be associated with the words ‘settlement’ and ‘set distances’ is going to be centuriation, i.e. the practice of planning out the use of a landscape, through the medium of a grid centred on and expanded from the 90° intersection of the two most important roads, the *decumanus maximus* and *cardo maximus*. The name centuriation is derived from the name of the land unit *centuria*, which is the plot contained within a square of the grid. This planning system has long been known as a common practice throughout the empire, and one whose success and flexibility are attested by the fact that modern roads and field divisions in the interested areas often still follow the millennia-old Roman grid. The research on this system has been based mostly on morphological grounds in the past century (e.g. Bradford 1947; Clavel-Léveque 1983), but recent research has established that an entirely morphological approach is inadequate and incomplete to properly assess a centuriated landscape (Palet and Orengo 2011, 384). Modern studies on centuriated landscapes are thus diachronic and include elements of history and environmental studies (e.g. Romano 2003; Palet and Orengo 2011).

The possibility of centuriation in the Romano-British landscape has been suggested, mostly on morphological considerations, at the end of the 19th and in the early 20th centuries (e.g. Sharpe 1918), with even some of the most sceptical archaeologists forced to consider it as a viable theory for areas of Southern England (Haverfield 1918). However, this theory never gained steady ground the further north it was applied in England, and the most recent papers published by Peterson on the subject have largely been ignored (1990, 1995, 2006). The intrinsic characteristics of this landscape, as surmised by Peterson (1990), are:

- i. The cadastral grid has an orientation of 17.088 North-North-West
- ii. The grid is composed of square cells, whose sides are 20 *actus* or 710m long.
- iii. The Roman roads are located on or parallel to the *limes* of each cell

Morphologically speaking, 20 *actus* are approximately a ¼ of the distance between Group A settlements, but between the lack of horizontal depth and the uneven spacing of the settlements when all of the neighbouring sample tiles in Annandale are looked at together, that information has little to no meaning. Beyond this point, as Palet and Orengo have remarked, morphology alone is not enough to prove the centuriation of a landscape (2011,

384), and as the Northumberland survey (Hodgson, McKelvey, and Muncaster 2012) demonstrates, the presence of a possible underlying pattern need not be Roman in origin, regardless of the one dated settlement present in South-West Scotland.

Leaving the issue of planning aside, there is, however, significant evidence of Roman involvement in this region. This evidence is contained in a little-known inscription (ILS 1338, CILXI 5213) found in Fulginiae, Umbria, Italy, which reads:

“[...] o prae[f./ cob] ortis trib. milit[um]/ [p]raef. equit. censito[ri]/ Brittonum
Anavion[ens.]/ proc. Aug. Armeniae maio[ris]/ ludi magni hereditatium/ et a censibus
a libellis Aug. /praef. Vigilum praef. Aegy[pti]/ M. Taminius Ce[...]” (Birley 1981,
302)

The surviving text of the inscriptions lists the achievements of T. Haterius Nepos, who either originated from or lived in the city of Fulginiae. The public post of interest here is that of *censitor Brittonum Anavionenses*: the censor for the area of Britain centred on the river *Anava*. Richmond, who is the only one to have done some reconstructive work on this word, argues that this place name equates to the modern river Annan, so that the area Nepos was in charge of censuring was Annandale and, by plausible extension, Area 1 (Richmond and Crawford 1949, 22).

Chronologically, Nepos has been recorded as *praefect* for Egypt in 119 AD, and as procurator for *Armenia Maior* in the period 114–117 AD: since *censitor* is a lower position than *procurator*, A. Birley has suggested a date of ca. 112 AD for the census of *Brittannia Anavionenses* (1981, 302–303). This date certainly ties in with the numismatic profile of Roman presence in Area 1, as it sits comfortably in the middle of the period of interaction (pp. 47 – 56). However, one may also note that this date also pre-dates the traditional period of occupation in the Antonine period by over three decades, and is instead contemporary with the Stanegate frontier, introduced in the Literature Review (pp. 23 – 24) as the predecessor of Hadrian’s Wall. The date of this little-used inscription is, therefore, a powerful reminder of the fluidity of frontier lines throughout most of Roman history (Crow 2007): just because an area fell outside of a linear frontier, it does not necessarily mean that it was outside of the Empire.

A Roman census, in fact, was a periodically organised assessment of the populations which lived within the Republic first and the Empire later. It recorded the names, origins

and status of adult males, their dependants if any, and their economic assets: the stress on the number of adult males and their wealth, originally a measure of one's position, duties, and privileges within the Republic's socio-political system, still served well as assessment of tax dues from each region under the empire (Nicolet 2001, 13–14; Boatwright, Gargola, and Talbert 2004, 48). After Augustus, censuses became periodic events and were carried out region by region (Boatwright, Gargola, and Talbert 2004, 481).

As far as Britain is concerned, it is known from references in Latin texts that the natives, like any other group in the Empire, were expected to pay tributes, either monetary or in kind. Tacitus himself makes reference to them and to some of the profiteering practices involved with their payment, in the *Agricola* (2006, §20, 64–65). In the same passage, Tacitus suggests that, under Agricola at least, it became common practice to deliver tribute directly to the nearest winter quarter of the Roman army, thus implying that at least part of the tribute in kind went to meet the soldiers' rations. Local supply to Roman military installations is also attested archaeologically, thanks to the analysis of organic residues at forts such as Elginaugh (Hanson 2009, v.2, pp. 672 – 673). However, two of the late first and early second century tablets found at Vindolanda, a fort on the Stanegate which predates Hadrian's Wall, refer to a group of '*Brittunculi*', or 'miserable little Britons', and '*Anavion[enses]*', which had been sent to the fort to be trained as soldiers. A. Birley links these men to the census, suggesting that it had not been conducted to assess how much food could be levied, but rather to gather conscripts (2002, 94–97), albeit both valuations may have taken place at the same time. In fact, Vindolanda's tablets have been used recently to suggest a dual economic model for the northern frontier, with an official, Empire-wide, supply chain co-existing with entrepreneurial markets at the local level (Grønlund Evers 2011, 32).

The evidence from the site of Castle O'er, a native hillfort usually quoted to counter the hostility argument brought forward by Burnswark, is potentially coherent with the implications of Nepos inscription. Castle O'er is a complex multi-phase settlement (fig. 19), which has been partially excavated and radiocarbon-dated during the exploration of nearby Over Rig by Mercer (1985), with the express goal of clarifying its chronology and defences. The site was originally a palisaded enclosed settlement holding ring-ditch type house(s) (phase 1); which was then fortified with a rampart (phase 2, fig. 19), shortly before a series of stock-control outworks was added to enlarge the site's environs

considerably (phase 3); the rampart was later destroyed –there are possible but limited traces of vitrification- and its line was cut through and replaced with a wall, which caused the re-arrangement of the buildings within the fort (phase 4); after this phase the site is abandoned, though there is early medieval activity associated with the farthest outworks (Mercer, pers. comm.; RCAHMS 1997, 307). The most reliable radiocarbon dates for phases 3 and 4 put the site firmly in the Late and Roman Iron Ages (http://canmore.rcahms.gov.uk/en/c14/?numlink=67376&nmrsname=Castle+O%2Er&sample_id=).

The significance of this hillfort is based on its association with the Roman fort at Raeburnfoot (67274) and with the Torwood-Raeburnfoot-Newstead road which runs close to it: unlike Burnswark and its possible destruction, Castle O'er appears to have prospered in the Roman Iron Age, with an increased agricultural footprint during the late first and early second century (phase 3). On this basis, and on the basis of the amount of land enclosed by the outworks, the availability of fresh water within the enclosed space, and the low scarp around the site, which is consistent with measures used to avoid cattle kicking through fences (pers. comm.), Mercer argues that the site was an arranged collection point for the live tribute due to the Roman forces.

This tribute consisted most likely of cattle and possibly horses, but there is no evidence of either being actually reared at the site, prompting Mercer to think that the animals were being delivered to Castle O'er from the neighbouring unexcavated settlements along the river Esk basin (pers. comm.). A possible implication for this scenario is that the satellite settlements would be visible from Castle O'er, and would in turn always be visually aware of the hillfort. Visibility has long been used by archaeologists to suggest relationships among settlements and monuments (e.g. Tilley 1994), both from a practical and a symbolic perspective. Modern research projects on the subject continue to highlight both of these issues: for instance, Blake argued that the placement of nuraghe and funerary monuments in Sardinia reflects and embodies a specific local ideology (2001); and both Garcia-Moreno and Brughmans have discussed how visibility can be used to reflect and thus reinforce social organisation through the pre-eminence of specific sites across time periods (Garcia-Moreno 2013; Brughmans, Keay, and Earl 2015). Beyond cultural statements, it also ought to be mentioned that intervisibility is also a successful defensive mechanism (e.g. Rua, Gonçalves, and Figueiredo 2013): whether a natural disaster or an attack, intervisibility helped to guarantee that neighbouring settlements would have been

aware of the event and hopefully helped the affected community. In this case, regardless of any social organisation aspects which will be discussed in Chapter 7 (pp. 161 – 172), the high value of cattle, coupled with the necessity of paying tribute to the Roman military, may have suggested the benefits of such an arrangement.

The simplest way to test this scenario is with a line of sight analysis in ArcGIS, centred on Castle O'er. While this analysis is not perfect, as it assumes routinely minimal ground cover, fair weather, and a standardised observer's height, the results suggest that, of the seventeen closest settlements to the fort, as many as nine are visible from the hillfort itself (table 12). These computer-based results can also be confirmed by a visit to the ruins of the hillfort, which retains good visibility over the basin of the Esk even with less than perfect weather conditions (fig. 20). While the inter-visibility relationship does not prove the synchronicity of the sites or Mercer's theory, it adds weight to the argument. Assuming this theory is correct, then, it results in a centralised system with a fort and a number of satellite, visible, settlements, along a river basin.

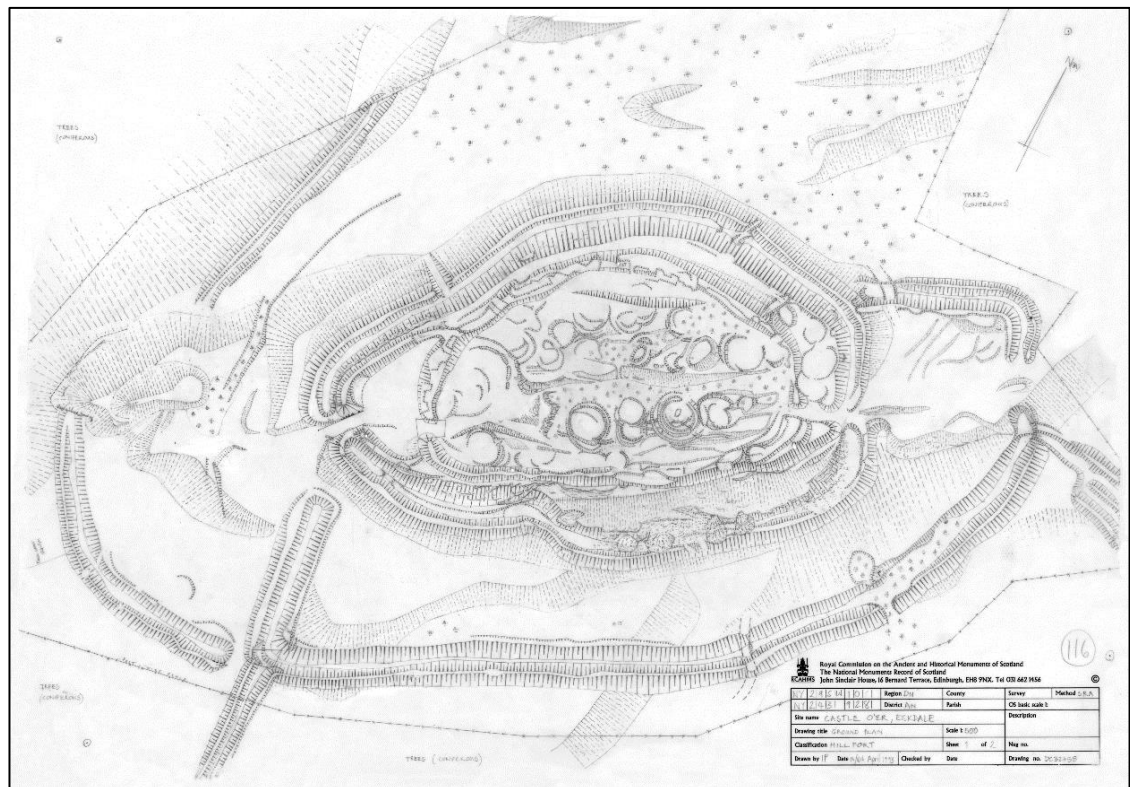


FIGURE 19: PLAN OF CASTLE O'ER (©RCAHMS, SC1354839)

This centralised system could be expected to be a common arrangement, especially within a society often described as tribal or fragmented. However, it proved to be an elusive combination across the sampled study area. In fact, this pattern is only found within the

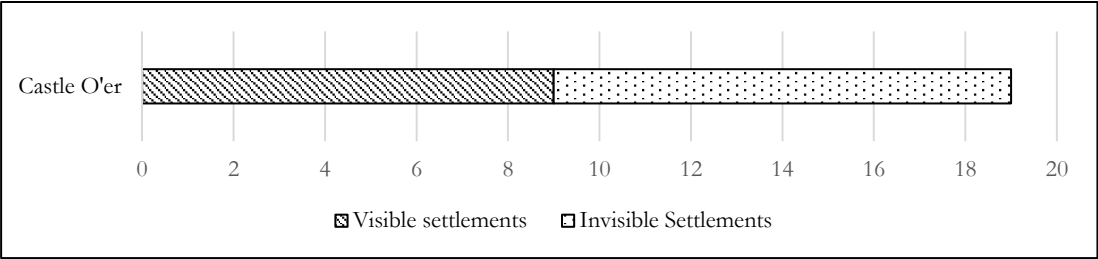


TABLE 12: RESULTS OF THE LINE OF SIGHT ANALYSIS FOR CASTLE O'ER, FOR SETTLEMENTS IN A 2KM RADIUS



FIGURE 20: COMPOSITE TRYPTIC OF 360 ° VIEW FROM CASTLE O'ER, CLOCKWISE FROM NORTH TO NORTH, TAKEN ON AN OVERCAST SUMMER DAY AT CA. 2:00 P.M.

boundaries of Area 1, with possible examples from tile NT00 (Hell's Hole, 48425; Middlegill, 48362), NY08 (Archwood Hill, 66231), NY26 (Dornock Mains, 67014), NY28 (Newland Hill, 67181), NY29 (Bessie's Hill, 67265) and NX88 (Sundaywell, 65134), with the results expressed in table 13, from which it can also be appreciated that not all of these examples are, in fact, promising. The spread of the sites can be appreciated in fig. 21, where all of the sites are present. Of these sites, Dornock Mains is anomalous, as it has good visibility over a number of settlements, but they are not within the same river basin. It will, by now, be expected that none of these sites has been excavated, nor surveyed to the same effect that Castle O'er has.

It should also be remembered that the settlement pattern is incomplete, and is particularly lacking in reference to settlements: while it is likely that most hillforts, having retained a higher visibility either on the ground or from the air, have been identified, new surveys routinely unearth new settlements. For instance, most of the north-west quadrant of tile NX88 was almost completely devoid of settlements, until the recent survey centred on the Skelston area discovered well over a hundred burnt mounds and several new open and curvilinear enclosed settlements (<https://canmore.org.uk/site/65093/skelstonburn>). Thus it is possible that this pattern extends beyond Area 1.

Nonetheless, at the moment the evidence suggests that Castle O'er and possible similar hillforts are distributed only in the same area as the rectilinear enclosed settlements, and, with one exception, only close to these settlements, at least within the boundaries of the sample study area (fig. 21). This creates another point of difference with the similar rectilinear enclosed settlements in Northumberland, which seem largely to be either on

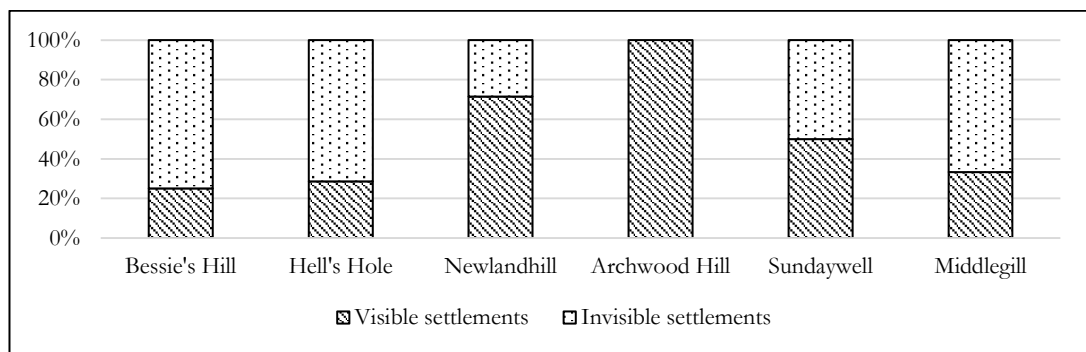


TABLE 13: VISIBILITY FROM SELECT HILLFORT'S IN AREA 1 IN A 2KM RADIUS BASED ON ARCGIS LINE OF SIGHT ANALYSIS

their own or the leading settlement over a number of suspected unenclosed settlements (Hodgson, McKelvey, and Muncaster 2012, 206–211).

In summary, the main features of Area I's landscape are rectilinear enclosed settlements, some of which are seemingly located at regular distances of approximately 3km. The spread of the latter settlements is also potentially associated with that of Castle O'er type sites, i.e. with central fortified settlements or hillforts surrounded by a number of smaller settlements which are all visible from its area. Castle O'er is certainly older than the Late

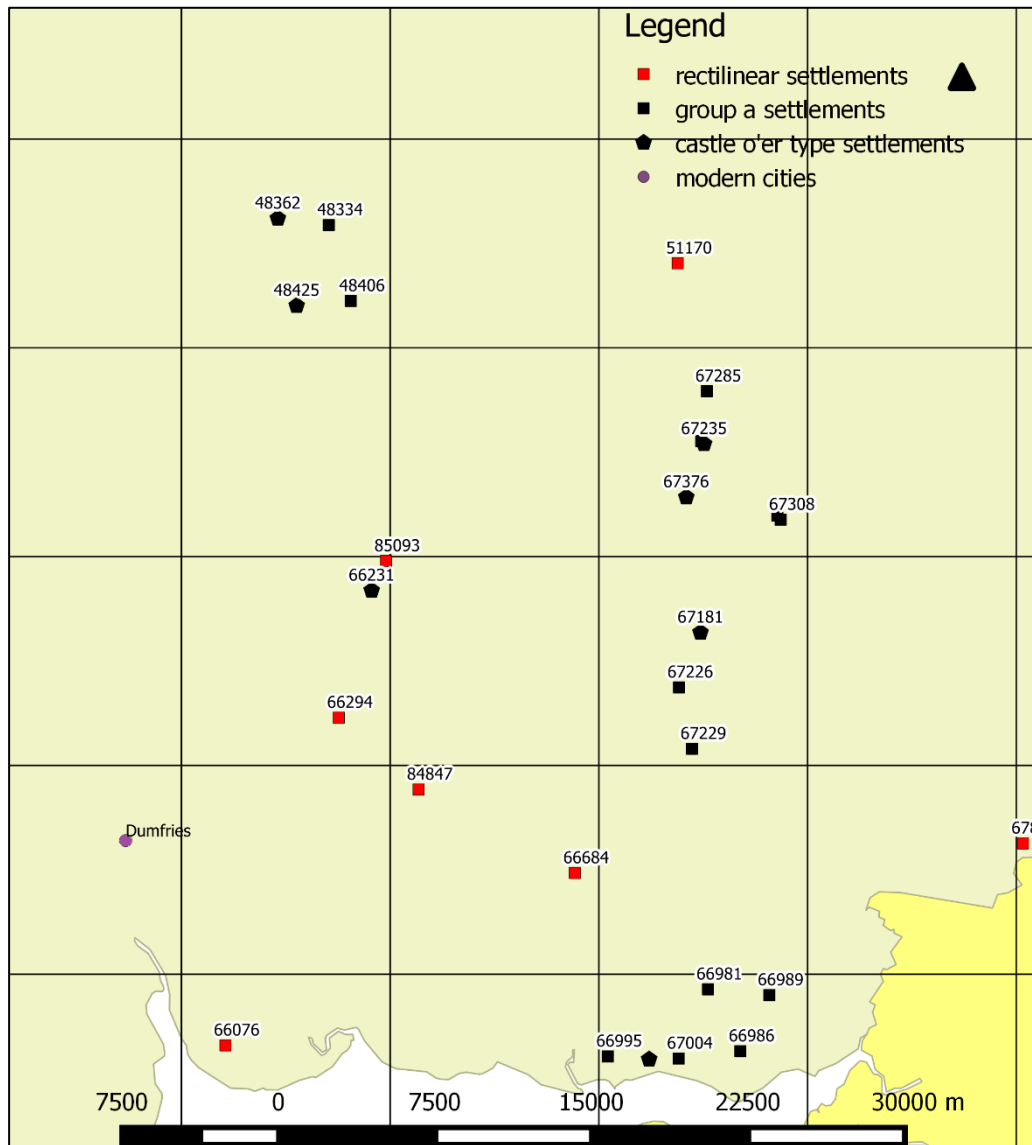


FIGURE 21: DISTRIBUTION OF CASTLE O'ER TYPE SITES (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

and Roman Iron Ages, whilst the one dated rectilinear settlement in Area 1 was seemingly built either during or just before the Roman Iron Age. Beyond strictly settlement landscape evidence, it has also emerged that Area I saw significant interaction with the Roman world, up to and potentially including an early annexation within the Empire, if we follow the evidence from the Vindolanda tablet and the inscription from Italy.

In summary, it seems highly likely that during the Early Roman Iron Age there was significant involvement with the Roman world, and potentially some settlement landscape changes if the interpretation of Castle O'er landscape is accepted. However, the seeming regularity of group A settlement has yet to be explained. The next logical assumption is that this regular pattern is not at all Roman in its origins (on non-Roman landscape planning, see e.g. Robb 2013; Rao 2015, 60), but that this is a native pattern. If we follow this theory, there are now a number of questions which need to be answered:

1. When did this pattern begin?
2. Why did this pattern emerge?
3. What was the impact of the Roman occupation on this pattern?

The answer to the first question is limited in depth because we only truly have two dated sites: Castle O'er and Carronbridge. Following their evidence, and with the *caveat* that this may very well change as more dates become available, this pattern may either slightly predate the Roman occupation or be concomitant to it. The only dated settlement landscape featuring rectilinear enclosures, i.e. Northumbria, has significantly different dates, originating in the Early Iron Age, than those suggested by Carronbridge, but there also seem to be other differences between the two landscapes, such as the different relationship of these settlements with hillforts across the assessed sample in South-West Scotland and Northumbria, as seen above (Hodgson et al., 2012), so at the moment it is unclear how much the two landscapes can be used to inform each other's understanding and dating. On the other hand, both the sites from Northumbria and the two dated sites in the sample study area share similar end dates, the former around 120 to 140 AD and the latter probably soon after, which is roughly concomitant with the final development of Hadrian's Wall.

As to why, there are two options: the first is that this is completely a native development, the second is that this development was encouraged by the Roman occupation. In the

former scenario, the elite of centres such as Castle O'er may have been becoming stronger, and thus attracting more people to them for protection and as followers. In turn, they would have needed to create new settlements, which become arranged around them at regular distances and which may have been rectilinear in fashion to either make a statement of importance or to reflect changing fashion in architectural styles. Following this possibility, one may ask if there was a three-tier system of importance, with hillfort, rectilinear enclosed settlements, and open settlements, thus reflecting significant social stratification for the period in question, but at present, we lack the data to argue this hypothesis.

The second possibility is not so much a question of centuriation, but it reflects the possibility that the Romans may have either encouraged such a development, or significantly supported friendly elites to the detriment of the previous power structure—or both. Roman attention, in this case, may very well predate the official conquest of the area and may be in line with the evidence from the Nepos inscription. There is, of course, a significant chance that both scenarios are at play: a booming complex society being subtly, or not so subtly, re-shaped by their new and far more powerful neighbour in a direction of their liking.

THE NATIVES AND THE ROMANS IN AREA I

The issue then becomes that of the impact of the Romans on this either developing or developed social structure, given that the evidence for tribute gathering and supervision already in the pre-Hadrian period is significant. We have seen already that Castle O'er flourishes thanks to the interaction with the Roman, and the economic demands of the army which may well have fostered a boom in the intensity and spread of farming in the region, so it is possible that group A pattern we noticed also flourishes in the period and is in fact chronologically linked. However, in chapter 4 we have seen how Annandale and Nithsdale, i.e. Area 1, have enough unusual characteristics in terms of Roman military bases that there is the significant possibility of widespread hostility and guerrilla-style fighting in the region.

Beyond Roman military bases, the single native site which is quoted most often in this regard is Burnswark, NY17, because of the possible evidence of a siege event. Burnswark is not a single site, but a multi-period complex of sites, which includes a native fort, several settlements, enclosures, funerary sites and Roman temporary camps and fortifications (see

Gazetteer). The most relevant features of the hostility argument are the hillfort (72883) and the temporary camps which face its northern and southern sides (72885).

The former, which is superseded by an open settlement, is roughly elliptical in shape and is located in an easily defensible position, further reinforced by ramparts: two on the southern side, which has the least natural defences, and a single one along the rest of the circuit (Jobey 1978, 56–67; fig. 22). The Roman material culture recovered from the site and the surrounding camps suggests a date in the second century AD for the Roman Iron Age phase, probably at the beginning of the Antonine period, i.e. ca. 140s AD (Jobey 1978, 84–96), but the rampart's foundation have yielded a *post quem* radiocarbon date in



FIGURE 22: AERIAL PHOTOGRAPH OF THE SETTLEMENT AT BURNSWARK, WITH ONE OF THE TEMPORARY CAMPS VISIBLE IN THE BACKGROUND (©RCAHMS, SC349444)

the Middle Iron Age (Jobey 1978, 67). While an occupation phase in the Late Iron Age was considered possible for the hillfort, it was Jobey's opinion that the defences were already in a state of abandonment by the time that the Roman slingshots, arrows and ballista impacted them, as they were consistently recovered from the surface of the ramparts' remains, rather than within them, so that the siege may have actually involved the later open settlement rather than the hillfort (1978, 67).

The temporary camps have been the focus of numerous papers over time, and even recently their interpretation still fluctuates between two schools of thought:

- i. The camps were built for practising siege and artillery warfare, so that the siege of Burnswark was a staged training exercise or a series of exercises (e.g. Collingwood 1925; Steer 1964). Davies has made the strongest argument in this respect, criticising the unusual character of the camps and of the weapons attested: their defences are unfinished, their interior includes time-consuming stone features unusual for siege camps, and heavy artillery weapons (i.e. ballista balls) do not appear to be used in the takeover of other hillforts in Britain, and they seem an overkill in relation to the known defences of the native fort (1972, 99–107). However, some of his arguments are negated by evidence from the then relatively recent excavation of Hod Hill, a hillfort located in Dorset, Southern England (Richmond 1968).
- ii. The camps were built to surround a hostile stronghold, and the material culture evidence reflects a real siege and battle. This argument is the oldest reading of the evidence for the sites, which was first voiced in the 18th century (e.g. Gordon 1726, 17) and steadily gained momentum (e.g. MacDonald 1920) until Collingwood's damning critique of this interpretation (1925). Some of the reasons for the steady decline of this theory are the faulty association with the Agricolan period and the assumption that the target of the assault would have been the fort and its ramparts, but a recent re-appraisal of the twin camps, however, has pointed out that an Antonine or later dating does not preclude military activity, and that an open settlement is not an automatically invalid military target (Campbell 2003). The usage of non-expendable lead bullets, which are almost impossible to recover once spent on a grassy landscape, rather than clay bullets, also suggests that this was not a training event (Reid 2016).

The points raised by Campbell (2003) are valid ones, especially when considered in tandem with Symonds' suggestion of local unrest and guerrilla tactics employed by native populations (2011): the settlement at Burnswark might have harboured or thought to have helped a group of rebels, and so the 'overkill' artillery attack, which Davies used as a reason against a real siege (1972, 106), might have been made as a clear warning to anyone else planning unrest against Roman control. Forceful or disproportionate responses are, after all, common practices against rebellion or in punitive campaigns (Goldsworthy 2007, 89–93). A historically documented example of this is Kremna, a city in Pisidia, Asia Minor, which became the theatre of a rebellion in 278 AD, fuelled by economic and ideological reasons (Mitchell 1999). Historical sources, which, in line with their Roman worldview, offer a very dim opinion of the leader of the rebellion, recount how the siege was protracted long enough to drive the inhabitants to selectively cull themselves in the futile hope to win the conflict, and how Probus, the emperor under which the rebellion occurred, crushed the 'bandits' mercilessly (Horsley and Mitchell 2000, 3–5). Given Roman military practices and the contextual evidence from the Roman military landscape of Area 1, the siege and destruction of the settlement at Burnswark are, therefore, entirely possible.

CARRONBRIDGE

The relationship between Area 1 and the Roman world need not be limited to settlement landscape analysis only. While there is very little in terms of excavated sites, it is nonetheless possible to draw some tentative conclusions about the interaction between the two groups through the analysis of Area 1 material culture assemblages. The stratified material culture assemblage recovered from the Roman Iron Age phase at Carronbridge is very limited in extent: five items of personal adornment, all consistent with a late first and early second-century date (see Appendix 2; Johnston et al. 1994).

The most important amongst these five objects is a trumpet design brooch. The brooch (fig. 23) has been executed with what has been described as a "heavy-handed" (Johnston et al. 1994, 234) decoration, resulting in an almost knobbly appearance. Overall, it is heavily reminiscent of the Carmarthen (South Wales) school which started ca. 50 AD and began spreading a decade later: the brooch is, therefore, likely to be a late first century object (Johnston et al. 1994, 234). The other finds are a fragment of a Kilbride type 3A glass bracelet (fig. 24), and three different beads of types common during the Roman Iron

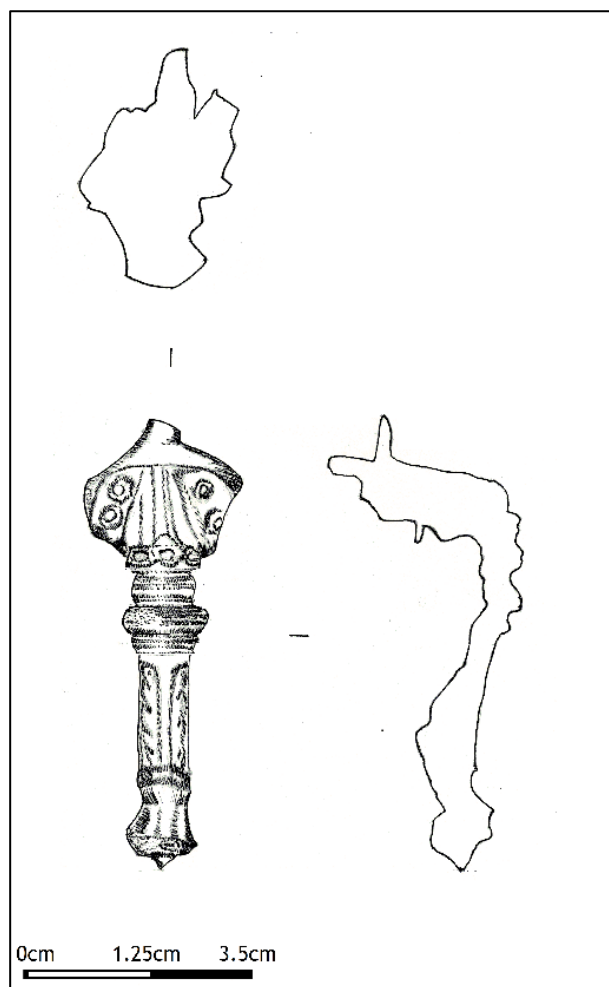


FIGURE 23: TAPED BROOCH FROM CARRONBRIDGE, DUMFM 199.1.67

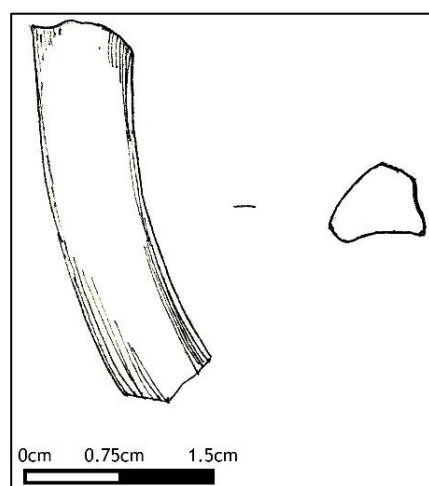


FIGURE 24: GLASS BRACELET FROM CARRONBRIDGE, DUMFM 1995.2.67

Age across Scotland (Johnston et al. 1994, 268–269). The bracelet has an almost triangular section, and is milky white in colour, without any additional decorations. It too has been dated to the late first or early second century AD on stylistic grounds (Johnston et al. 1994, 248, 268–269). Both bracelet and brooch are currently located in the Dumfries museum (DUMFM 1995.1.67 and DUMFM 199.2.67). The beads should also be there, but they have been stored with other beads from Dumfriesshire and could not be identified on the occasion of the author's visit. This assemblage is largely skewed towards Roman objects, if the beads are individually counted. However, its limited size does not quite allow for any sweeping conclusion, other than the recognition that some items of personal adornment dated within the Antonine period horizon are present, together with native items of similar function which display an awareness of stylistic fashions from southern Britain.

CASTLE O'ER

The published assemblage of Castle O'er, derived from antiquarian surveys (see Appendix 2), is not much larger than that for Carronbridge, and since it is derivative of early surveys of the site its stratigraphy is not as precise as that of Carronbridge. Aside from an unspecified number of spindle whorls, which are a common find across almost every single settlement site with a material culture assemblage for the study period, Truckell lists for the site mostly beads: seven glass melon beads, a type common in the Roman Iron Age but occasionally earlier, some beads and discs in jets, a material far more common in Area 3 within the study region or elsewhere in Southern Britain than it is in Area 1, and a bauxite bead of likely Antrim provenance (1964, 60). The Dumfries Museum catalogue includes almost all of the items for Castle O'er, but unfortunately not the last bead, which the museum staff thinks must have made its way into a private collection. As for the jet beads and discs, there are no such items on the Dumfries Museum record at all.

BOONIES

Moving beyond sites with a clear affiliation with the Roman world, there is another excavated settlement site which needs to be mentioned within an analysis of Area 1: Boonies. Like Carronbridge, Boonies is located outside of the landscape sample area, sitting just north of the border between NY38 and NY39. Unlike Carronbridge, Boonies is a scooped settlement: a hollowed-out central area defined by a ditch and bank, whose construction was dated to the period 70-110 AD using radiocarbon and

dendrochronological techniques (Jobey 1975, 124–125). The settlement's thirteen houses testify to its long life, as many of them could not have existed synchronically (Jobey 1975, 127–133, 138).

The inhabitants were engaged, most likely, into a mixed farming economy, as attested by settlement type, which is considered particularly suited to contain cattle thanks to the scooped yard, and by material culture (Material Culture, items with known contexts, items nn.31 – 41), and in particular by the small number of querns which suggests cereal processing at the site, though it ought to be pointed out that such items are ubiquitous in settlements of this period (Jobey 1975, 138). Beyond the querns, the assemblage at the site is comprised of a small collection of sherds, and two items of Roman personal adornment (Material Culture, items with known contexts, items nn.36 – 41). The pottery is mostly of native types, although there are three sherds of plain undecorated Roman pottery, overall dating to the late first and early second century (table 16) (Jobey 1975, 135). The other two items are a fragment of bracelet of near-identical colour and shape to the one from Carronbridge, and a brooch of Fowler 3A type, typically associated with the first to the third century AD, although its recovery within the spill from the bank suggests a date for this particular examples from the earlier rather than the later distribution period (Jobey 1975, 135–137).

MIDDLEBIE

The hoard at Middlebie has been analysed and discussed in detail by Macgregor (1976). It is composed almost exclusively of horse trappings, and all but two of the items are consistent with native lowland craftsmanship. The two outliers are the only worn items in the group and are comparable to craftsmanship usually associated with South East

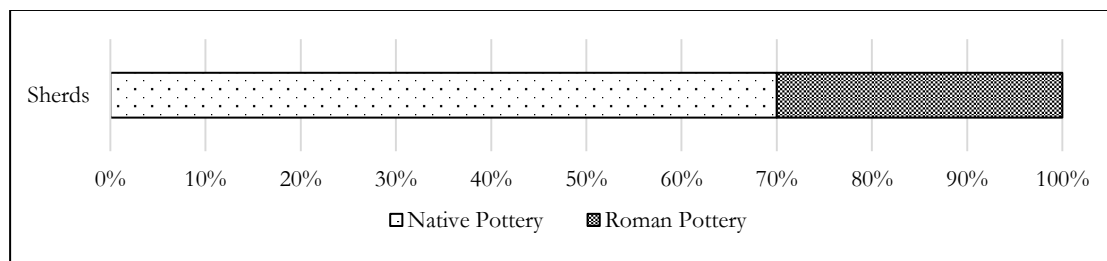


TABLE 14: BOONIES' POTTERY ASSEMBLAGE (BASED ON JOBEY 1975, 135)

England. Macgregor posits that they may, in fact, have travelled to the area with their owners (1976, v.1, p.180), though the explanation he gives, i.e. the amount of wear, feels inadequate: the wear pattern may be due to different age at deposition, for instance.

Regardless of the procurement of the imported items from Southern England, which will be touched upon in the next chapter (pp. 145 – 160), Roman objects are entirely absent from the hoard. One possible explanation to this is that the hoard predates widespread contact with the Roman world, which is possible albeit counter to MacGregor's dating of the hoard to the late first century AD (1976, 180). In this case, the absence of items is also potentially conspicuous because Middlebie is located on the border with tile NY26, along a coastal area which witnessed Flavian (i.e. late first century AD) troop movements to monitor the critical confluence area of the Nith and Solway, whose importance is also attested by the Roman camp and signal station at Ward Law (66098, 660999), NY06 (Jones 2011, 118, 316–317). Beyond the location, one may assume that frequent contact with Roman individuals was also underway, on the basis of the *Anava* census discussed above (pp. 77 – 78). This absence is in contrast with the composition of the other main Roman Iron Age hoard the study area, Carlingwark, located in Area 3 (see below pp. 108 – 111), which includes more identified Roman than native items, although it is in line with several other hoards of this time period (Hunter 1997, 110).

It stands to reason, then, that the exclusion of Roman items from the Middlebie hoard may not be not casual, though its exact reasons are unclear. However, the dating of the hoard is not sufficiently precise to exclude the possibility that the hoard predates any intensive contact with the Roman presence in the area, which may explain the absence of Roman material.

STRAY FINDS

Stray finds of Roman origins, within the parameters set in the methodology (pp. 38 – 40), are as limited as those found from excavated settlements. Ignoring items found in or very close to Roman forts, there are only six find spots: two belong to melon beads, and two more to sherds of coarse ware pottery (see Appendix 2). The melon beads are not unusual, as the evidence from Castle O'er suggests, and, while Samian wares tend to receive more attention, some limited presence of coarse ware is also not uncommon from Roman Iron Age sites (see for example the assemblage from Glenhead, below p. 129). A group of bronze items of Roman origins, which may or may not have been a small hoard, was

found at Auchenskeoch (46386), but all of the items, bar a second century tinned plate, were destroyed on recovery (Curle 1932, 270), so that it is not possible to integrate them fully into a discussion on this period, beyond the evidence that Roman metalwork was indeed available in the region, despite its absence from Middlebie (see above).

The most stylistically significant stray find comes from Ericstane (48485), where a gold crossbow fibula was located close to a Roman road. The fibula, which is missing arms and pin, bears an inscription in honour of the *vicennalia* of Jupiter Augustus, a title assumed by Diocletian, who celebrated his *vicennalia* with Maximian at the end of November 303 AD, the *terminus post quem* of the brooch (Curle 1932, 335, 370–371). The item, which is in private possession, was suggested to have been lost during an early fourth century Roman campaign in Scotland, linked to the unrest attested in the sub and post-Roman periods north of Hadrian's Wall (Curle 1932, 371; Literature Review, pp. 23 – 24), in which case its loss is not indicative of constructive interaction with the inhabitants of Area 1.

SUMMARY

Summing up the preceding section, excavated settlements have a small assemblage, with an even smaller Roman component, which is comprised mostly of items of personal adornment comparable to similar native items from other areas of Roman Britain. Roman stray finds, coins excluded, are also few. The native-Roman relationship as represented by objects can, therefore, be defined as limited: limited in typology, but most importantly limited in social reach. Roman items are also excluded from the votive hoard found at Middlebie, though this hoard may or may not actually be of Roman Iron Age. If we accept MacGregor's Roman Iron Age date of the hoard (1976, 180), however, the absence of Roman material culture from a ritual hoard and from high-status settlements with arguably close economic links with the Roman military becomes something worthy of comment. There are several possible options:

- i. Roman-Native interaction left limited archaeological traces because the items exchanged were strictly perishables and did not need to be contained in non-perishable containers.
- ii. Roman-Native interaction left limited archaeological traces because the key settlements sites of this region have not been explored yet, and the objects were

excluded from the Middlebie hoard because of ritualistic reasons that do not relate to social tensions.

- iii. Roman-Native interaction left limited archaeological traces because the two communities enjoyed an otherwise tense relationship, and there was no social bonus within a native setting in adopting or boasting exotic objects: as the demand for such items remained low, so did the supply.

The first and second cases are entirely possible, though they leave little space for continuing the discussion at this stage. The third option is seemingly at odds with the settlement landscape evidence: it has, in fact, been suggested that Area 1, because of its rich agricultural potential, was affected by a boom in settlements, fostered at least in part by the heightened demand for food by the Roman army. If this interpretation is also accepted, then a more complex reading of this period is necessary, which may be as follows.

The Romans seemingly considered the territory of Area 1 as an important resource to control, as attested by the *Anava* census and by the significant Roman military presence maintained even after the retreat from the Antonine Wall in 161 AD. At the same time, the evidence from Burnswark and from the very morphology of the Roman military presence has suggested that the native elites were not keen on recognising Roman authority, an issue which may have been exacerbated by the attitude of the Roman soldiers stationed in the area, as suggested by evidence from Vindolanda. If we return to the tablets found at this installations, an attitude of Roman superiority has been gathered from the usage of the newly coined pejorative '*Brittunculi*', which was used to refer to local draftees to be trained at the site (p. 78). Beyond this word, there is another tablet which may imply routine brutal treatment of the native populations, as opposed to proper treatment for citizens of the Empire (Birley 2002, 116 – 117). If this hostile outlook is coupled with Birley's hypothesis of conscriptions rather than, or on top of, levies in kind, underlying hostility against the Romans becomes a plausible scenario.

This brings us back to Symonds (2011) observations on the unusual character of Roman fortifications in the area and to Campbell's reading of an over-kill siege to flatten Burnswark (2003). The inhabitants of this settlement may have made a show of resistance, which was met by a clear message to the inhabitants of the region that rebellions would not be tolerated. Widespread hostility to the Roman world may also offer an explanation

of the composition of the Middlebie hoard, and specifically to the lack of Roman metalwork. It may be that items belonging to a group with negative connotations in the local culture were not deemed fit for a ritual or votive deposition.

Once the Romans largely withdrew to Hadrian's Wall in the late 150s and early 160s AD with the reduction of military presence, the economic pressure on the landscape of Area 1 was considerably reduced. If, following the hostility argument, we assume that a significant number of the native inhabitants did not want to trade with the Romans and did not look favourably on those who did, then it may be expected to see a reduction in the number of settlements, and especially of Group A settlements, in occupation in the Later Roman Iron Age, and a turn in the fortunes of the members of the elites which were friendly to the Romans: a drop in occupation which is possibly attested at both Carronbridge and Castle O'er.

If a significant rate of abandonment for these sites can be demonstrated in future excavations, this may further confirm the theory here presented, though it may also disprove it and point to either option i or ii, or to a different reading altogether.

AREA II

THE LONG IRON AGE: RITUAL AND SETTLEMENT

Area 2 groups together the tiles which house limited numbers of both settlements typical of areas 1 and 3: rectilinear enclosed settlement and duns/brochs, which, as seen above (pp. 63 – 66), are actually more akin to defended settlements or hillforts than mere households. The tiles from the landscape sample are NX04; NX06; NX08; NX28; NX34; NX43; NX64; NX66; NX85; and NX86 (see appendix 1). They represent the largest subgroup within the sample study area and cover the southern Atlantic coastline as well as the western southern coastline of the study area. Area 2, like Area 1, has yielded several excavated sites dated to the Late and Roman Iron Ages. Among the latter, perhaps the better known and most important is Rispaín Camp (63122), NX43, but the data from the still unpublished Buittle Castle (65002), NX86, promises to be invaluable in a discussion of the region. The Carlingwark hoard (64624), NX76, is also going to form an integral part of the present discussion, though the tile in which it was found does not form part of the landscape sample. It is included because its assemblage was part of the overall material culture assessment. In contrast, sites and monuments outside the sample tiles, such as the broch at Stair Haven for example, are however not additionally assessed.

Overall, Area 2 does not offer evidence of possible significant settlement landscape changes in the Roman Iron Age such as was the case for Area 1, but rather of continuity over the Long Iron Age, at least in so far as settlements are concerned. It is possible that this continuity actually masks other cultural developments, or that it is a trick of the limited sample chosen for the thesis, or a function of the limited number of excavated settlements in the region. With this caveat in mind, let us begin the analysis of this region with Rispaín Camp (63122), NX43, as it is the only recently excavated settlement known to the author.

Rispaín Camp is a rectilinear enclosed settlement, defined by a ditch flanked by an external and internal bank or rampart of defensive nature (Haggarty and Haggarty 1983, 40–41; fig. 25). The site's construction has been radiocarbon-dated to 40 BC \pm 80 (Haggarty and Haggarty 1983, 30), and the majority of the material culture evidence found agrees with a Late and Roman Iron Ages date (Haggarty and Haggarty 1983; see appendix 2). The economy of the site seems to have relied on arable agriculture, especially of barley and bread wheat, although bone analysis has revealed the remains of bovines, sheep/goats

and pigs (Haggarty and Haggarty 1983, 37, 39, 43). Metalwork might also have played a part in the site's economy, as the recovery of a pair of highly unusual iron tongs hints at (Haggarty 1983, 45); however, the absence of unfinished items or of moulds render further discussion impossible.

Beyond the tongue, there is another find from the site which sets it apart: two fragmentary human skulls, a likely female cranium missing the facial bones, and a frontal bone probably from a male cranium, which were found in the ditch, close to the gateway (Barbour 1902, 625–626). They were not associated with other human bones, so they were not deposited as part of a complete burial (Barbour 1902, 624). While the human remains have not been dated or re-examined until the time of writing to the author's knowledge, the absence of the remaining bones, and the way that the two separate remains complement each other, are suggestive of a deliberate ritual deposition involving the removal and re-deposition of these specific remains, which may be interpreted as an attempt to link a new settlement to the ancestors of its inhabitants. Of course, this is not the only possible interpretation. The remains may have been deposited at the end of the



FIGURE 25: AERIAL PHOTOGRAPH OF RISPAIN CAMP (©RCAHMS, DP147964)

settlement's life, in some kind of ritual abandonment, or they may have had a completely different meaning not linked to ancestry. It ought to be noted, in fact, that unusual depositions or partial human and animal remains are not unusual finds within household, especially in liminal areas such as ditches, and their deposition has been convincingly tied to the life-cycle of the households, especially to significant passages such as construction, abandonment, marriages, births and death (Bruck 1999).

However, the re-deposition of human remains in ditches has not been noted from other sites in the sample study area, and the interpretation given above ties in with the strong ritual and possibly ancestral-based culture that the material culture of the region suggests. In fact, Area 2, and especially its western tiles, had begun developing a strong ritual culture centred on Dowalton Loch (63208) since the Bronze Age, which is located to the north of Rispaig Camp. The lake had been used as a place for single deposition of items for over two-thousands years, from the Late Bronze Age to the Early Historic, even beyond the period covered by this thesis (Curle 1932, 374–5; Hunter 1994). Starting from the Late Iron Age onwards, a number of crannogs were built on the lake, an act which might indicate a shift from a communal space, to a space 'owned' by the inhabitants of the crannogs, which might have used this 'ownership' as a way to appropriate and command ritual power through symbolic 'command' of the lake's ritual network.

A possible discordant note in this proposed narrative is Teroy (60815). This site is a broch, located in an area with excellent visibility and overlooking the natural bay of Loch Ryan, in tile NX06 (pp. 263, 279). Its interior is large, with a diameter just short of nine metres, contained within a broad wall which houses a guard-chamber divided into an inner and outer area (Curle 1912, 184–186). The site was excavated in the early 20th century by Curle, who found a very thin occupational layer in the guard-chamber, and no surviving occupation debris in the interior, caused by the removal of the internal flagstones after the site abandonment (1912, 186–188).

The site assemblage is small: there is some limited evidence for iron smelting, coupled with some shards of 'dark red pottery' (Curle 1912, 187), part of a rotary quern and a small number of bone fragments from a layer of organic refuse (Curle 1912, 186 – 188; see Appendix 2). Most of this assemblage is not readily dateable: even rotary querns have been recently re-appraised to span the period from the Middle Iron Age to ca. AD 800 (McLaren and Hunter 2008). The exception is represented by the pottery shards, which,

while neither identified nor described further in the report, are thought to be Roman by the National Museum of Scotland, which has them in their care (accession number X.GA 928). The original description of the sherds is in keeping with that of the pottery found at Boonies, which overall dates to the late first and early second century AD (see pp. 90 – 91). This implies a period of occupation either during or after the Early Roman Iron Age, depending on whether the sherds represents exchange with the Roman world or the deposition of reused material (Swift 2012).

Curle felt that the site represents a single short occupation, despite the clearing of the floor (1912, 188), which may be in keeping with traditional interpretations of the chronology of substantial households in Southern Scotland. Prototypes of brochs emerge in Northern Scotland during the Early Iron Age, but these settlements become widespread only in the Late Iron Age (Mackie 2002, vol.1, 42). The outliers known from South-East Scotland, which are the only southern ones to have been significantly analysed to date, are thought to have been built towards the end of the Early Roman Iron Age, specifically during the Antonine period, and abandoned by Late Roman Iron Age after the Roman withdrawal and cessation of support to native elites (Macinnes 1984; Wilson 2001). The symbolic rationale behind the erection of these brochs, which are analysed as a separate class from the northern examples, is explained as the creation of a new visual representation of the power of the rising elites favoured by the Romans (Macinnes 1984). Following this traditional interpretation, the erection of brochs and other substantial households in the western reaches of Area 2 may indicate a slow erosion of the existing power structure centred on Dowalton Loch, though the short lifespan of the building might suggest that the changes represented by these structures were not successful in the long-term.

However, it may be possible, though unlikely, that Teroy had an earlier phase and was re-occupied during the Early Roman Iron Age. In fact, a recent reappraisal of substantial households suggests that substantial houses using the architectural language of the broch represent a much wider trend of the physical representation of power as architectural forms. These structures are much more widespread, geographically as well as chronologically, and thus the southern brochs with their much tighter Roman Iron Age dating may not represent southern ‘outliers’, but could form an integral part of a much wider and in other cases chronologically earlier phenomenon (Romankiewicz 2016, 12).

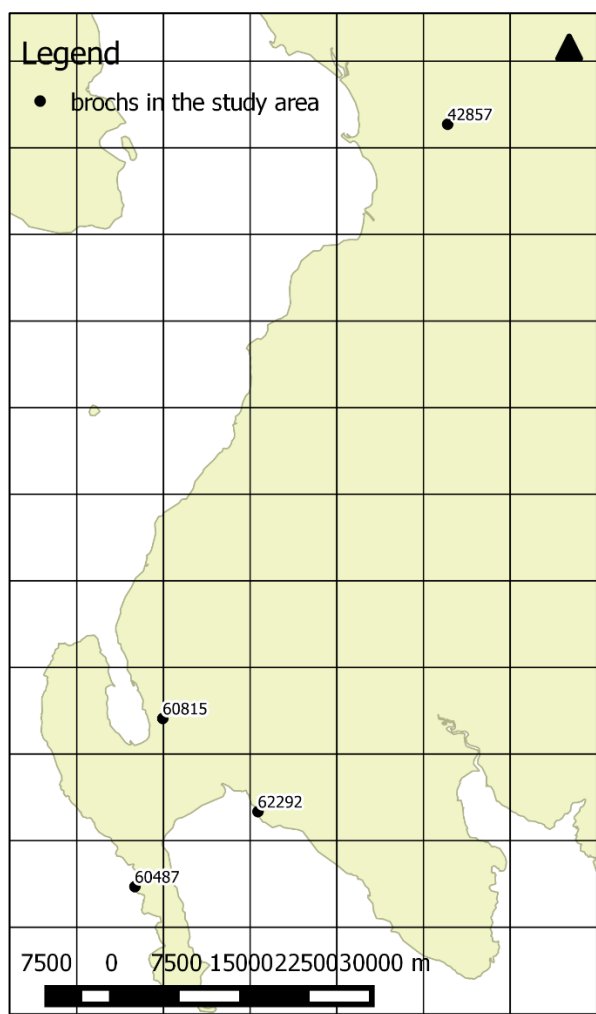


FIGURE 26: BROCHS IN STUDY AREA II (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

There are only four brochs listed by Canmore for the whole of South-West Scotland: Teroy (60815) and Doon Castle (60487) from the sample study area, and Craigie (42857) and Stairhaven (62292) beyond the sample (see fig. 26 for distribution). Of these, Teroy is the only excavated example, and it lacks modern absolute dating evidence. As such, it is not possible to look at close examples within the study area for possible dating parallels. Possible chronological parallels with dates from a recent excavation of a substantial household in central Scotland, the stone-walled roundhouse at Black Spout, Perthshire, offered radiocarbon evidence for a construction date in the Middle Iron Age (Strachan and Clarke 2013). If we ignore the architectural differences between Black Spout and Teroy, then a pre-Roman construction of Teroy or a precursor structure with a Roman re-occupation phase may potentially be feasible. In this case, Teroy and by extension the other brochs and possibly duns in the sampled area could potentially fit in with the socio-

cultural background hypothesised above. The re-occupation of an older settlement could be paralleled with the speculations advanced here for Rispain Camp's possible link with an ancestral past and the elite appropriation of Dowalton Loch.

However, all such speculations on unexcavated and undated evidence must remain tentative, especially since Black Spout and Teroy are not closely related architecturally, which makes any link between the two tenuous at best, and in fact suggests that Teroy does not belong to the same narrative proposed for Dowalton Loch and Rispain Camp, but may represent evidence of its decline instead.

The similarity between Dowalton Loch Crannogs and Rispain Camp, if we choose to interpret the human remains as intentional depositions, is worthy of note: the latter is a new settlement claiming to be part of a far older local tradition through the deposition of ancestral remains, while the former is a new settlement staking ownership and connection to a much older, locally significant site. It is, therefore, possible to posit that in Area 2, and especially in the western tiles of Area 2, local society was characterised by cultural norms which prioritized a link with the past.

The Late Iron Age might have witnessed the first archaeologically visible changes in socio-cultural expressions, with the physical 'ownership' of the community's past being appropriated by the elite, but the limited excavation evidence, and especially the lack of excavation of the crannogs on Dowalton Loch, does not permit broad claims. Likewise, it is not possible to explore within the confines of this project what might have led to this cultural shift towards archaism, as this seems to have begun just before the first Roman military installations in the local landscape, and thus in a period which is just before the one under analysis and which is, currently, not chronologically distinguishable in the absence of radiocarbon dates. This shift may have still been developing during the Roman Iron Age, if Teroy is interpreted as an older site reoccupied in the Early Roman Iron Age, or it may have been started being challenged by a new cultural paradigm if the site is intended as a Roman Iron Age foundation.

As a general note, the author would be wary of suggesting significant population movement as a concomitant cause of change, as suggested for Area 1 above (pp. 85, 94 – 95), and is in favour of internal processes of change. For example, the appropriation of ritual spaces by the local elite through the construction of *oppida* has been noted as typical

in the formation of centralised society in parts of Rhineland (Fernández-Götz and Roymans 2015), an example which may provide a comparative framework for the western tiles of Area 3. For most of the Bronze and Iron Ages, Dowalton loch was a liminal space used by the local community, with no settlement known on it or on its shores. The construction of the crannogs could be interpreted as the act of a part of the local population, staking a visible and physical claim on what was previously a ‘community’ ritual space, and metaphorically on the well of ritual power that had become imbued on the space. The erection of the crannogs, like the appropriation of former ritual sites by *oppida* in the Rhineland, could indicate the accretion of power and the beginning of a process of centralization. In parallel, the speculated ritual deposition of ancestral remains at Rispain Camp and the even more speculative reoccupation of Teroy could, in this line of argument be either a precursor of this trend, if found to be earlier than the crannogs, or the evidence that this social change, and the possible new cultural norms which accompanied it, was successful and archaism was, indeed, the key to social power in the Roman Iron Age of this particular area, if they were found to be later than the crannogs. The assessment of earlier monuments in the sample areas such as Standing Stones and Cairns has not had any significant bearing on assessing ancestral reuse within Area II and in evaluating this favoured interpretation here. As for the role of the Romans in this cultural shift to archaism, or in the possible deviation from it represented by Teroy’s foundation, an important clue lies in Teroy and Dowalton Loch’s precise foundation dates. Until those dates are available, that question must remain unanswered.

On a final note on the subject of culture and ritual, the western tiles of Area 2 have also preserved two bog bodies, which were, in fact, found in the general area of Dowalton Loch itself. However, both were found in the antiquarian period and the remains were subsequently either lost or misplaced, so it is impossible to offer more than a wide date span between the Late Bronze Age and the Roman Iron Age for both, on the base of their location, remains and recorded accompanying goods (Pickin 2004). It may be noted, however, that bog bodies are not found exclusively within Area 2, but have also been recovered from other parts of the study area, so that their significance may lay outside the socio-cultural shift suggested above.

THE NATIVES AND THE ROMANS IN AREA 2

Given the possible evidence for a strong ritual culture supporting an established elite, one might expect to see similar signs of stress in the native-Roman interactions as seen in Area 1. However, looking back to the pattern of Roman roads and forts seen in chapter 4, it is difficult to miss that there does not seem to be any major known fort in the region. If Area 2 is examined more closely than it was done in Chapter 4, there are two sites to be added to the discussion: the temporary camp at Glenluce (79047) and the fortlet on the river Bladnoch (318944) (fig. 27). Both sites are primarily known from aerial photographs. Glenluce is an almost square camp, enclosing an area approximately 44 acres in size, with gates protected by *tituli* (Jones 2011, 217). Both its morphology and the two coins recovered by a metal detectorist in its area, one of which is a Republican *denarius*, point to a Flavian date (Burnham et al. 2008, 278). Bladnoch is a small irregular fortlet, reminiscent in morphology and defences of those found in Annandale, and is thus also assumed to have been built in the Flavian period, though no dateable material culture was found by metal detectorists (Chapman et al. 2011, 336).

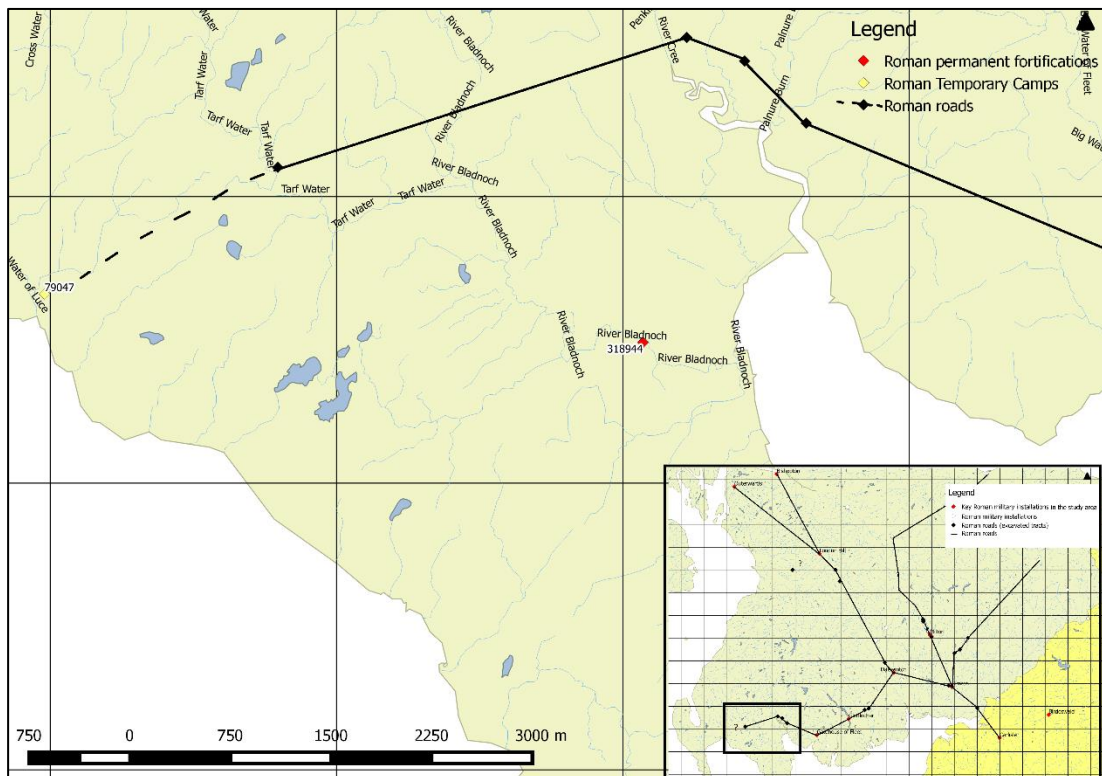


FIGURE 27: GLENLUCE AND BLADNOCH, AREA 2

The presence of Glenluce, close to a Roman road, is not in itself particularly surprising, though its early date certainly suggests a significant amount of Roman penetration in the landscape at an early date, and thus a longer period of interaction. Bladnoch, on the other hand, calls into question the level of early military control of the landscape, and it may pose the question of exactly where the boundaries of *Britannia Anavionenses* lay, and subsequently if this region was also subjected to taxation and/or levies. However, unlike in Annandale, Bladnoch is the only such military installation known to the author in Area 2. As such these are three possible interpretation:

- i. There is a sizeable gap in our knowledge of Roman military installations in this region, and Bladnoch is not an isolated fortlet
- ii. Bladnoch is effectively an outpost, beyond the border of *Britannia Anavionenses*, and Glenluce was only used as a march and/or road construction camp.
- iii. Bladnoch was built as part of an early and short-lived campaign to permanently annexe Area 2 into Roman territory, and Glenluce was linked or meant to be linked to a more long-term installation

The first scenario is unlikely, as scholarly understanding of Roman archaeology in Britain is overall better than that of native archaeology, though not impossible in and of itself. Bladnoch is, in fact, a relatively new addition to the landscape of Roman installations in Britain. However, this possibility is discounted here as implausible. The other two options are both possible and plausible, given Roman mutable policies and the existence of military installations beyond frontier lines. While a temporary camp and a fortlet, however early and unusual, do not compare to the number of installations known in Area 1, they still suggest a degree of continuous presence in the region, and given their near-coastal locations across two peninsulas, an interest in controlling Area 2, though not to the same minute extent as in Area 1

In opposition to the evidence for Area 1, a case could therefore be made that Roman rule or presence in the Early Roman Iron Age, depending on whether option 2 or 3 is followed, was not resisted to the same degree as it was in Area 1, and may even have been overall accepted as an opportunity. In this respect, it might be interesting to take into consideration numismatics. Area 2 has yielded a significant number of Roman coin issues, though it may be remembered from chapter 4 that numismatic evidence from Reece period 7 (i.e. the Antonine occupation period) is scarce. On the other hand, the greatest

majority of third-century coins comes from Area 2, even without taking the aforementioned hoard from Aird (60765) into consideration.

A more interesting aspect of the numismatic evidence from Area 2 is that of counterfeits. Area 2 has, in fact, offered uncontested evidence of a counterfeiting operation in full swing by the early third century AD: the very period when the original Roman coins supply dwindles in the area. The site in question is a dune system containing a number of shell middens at Brighthouse Bay, excavated as part of a construction project (Maynard 1993). The small pottery assemblage (Maynard et al. 1994, 23 – 24; see Appendix 2) recovered from the Roman period middens is mostly undiagnostic, but what is there suggests a *terminus post quem* in the second century AD; although the assemblage, on the whole, is highly unusual, since it is dominated by coarse ware rather than finer forms (e.g. Samian) (Maynard et al. 1994, 23–24). As for the middens themselves, analysis of the soil led the excavator to the conclusion that the middens were created with the intention of forming manure to use in the improvement of the local sandy soil (Maynard et al. 1994, 20), a conclusion which is reinforced by the evidence of furrow marks also found during the excavation (Maynard 1993). The associated settlement or settlements remain undiscovered. A different reading in favour of intermittent short-term occupation was offered by Hunter and Holmes based on the Roman Iron Age period middens: they posit that the area was out of the way, and intentionally chosen on this basis as a temporary base of operation for a counterfeiting operation (2001, 171).

The most important find from the middens is, in fact, something that, to this date, is completely unique across South-West Scotland: two incomplete moulds for producing counterfeit *denarii*. The first represents the obverse for a denarius of Aquila Severa, AD 220, whose original is a rare find in a Scottish context; the second mould is the reverse of a denarius of Severus Alexander, a more common coin minted AD 222 (Maynard et al. 1994, 21). They are in generally good conditions, excepting the damage on the latter mould on the upper side, caused when the mould was struck open to obtain the coin.

Most counterfeiting moulds were, in fact, meant to be used only once, and often more than one type of coin would be produced at the same time in order to maximise production (for an overview of how counterfeits were produced, see Hall 2014, 172–177). Whilst counterfeiting moulds in South-West Scotland are only represented by the examples found at Brighthouse Bay, counterfeit coinage was extremely common across

Roman Britain, with as much as a third of *denarii* in circulation in the early third century across the Empire being fake, and there is a significant number of such moulds from Southern Britain, especially from London (Hall 2014). Unlike the silver or silver alloy of the original coins, analysis of similar moulds and counterfeits from elsewhere in Scotland suggests that the most common metal for counterfeits was a “white bronze with no silver content” (Maynard et al. 1994, 21).

The recipients of the counterfeit *denarii* vary according to interpretation:

- i. The *denarii* were made for the use of the groups south of Hadrian’s Wall and were therefore likely made and exchanged in the early third century (Maynard et al. 1994, 21; McQ Holmes and Hunter 2001, 171).
- ii. The *denarii* were made at the instigation of a local person or persons. Given the evidence for the absence of a monetary economy in the Roman Iron Age and Early Historic period, the coins had assumed a different meaning in the local socio-cultural context (McQ Holmes and Hunter 2001, 173–174).

The first of these options suggests that the impact of the Romans on the long-term development of the area was limited, and their short-term presence probably minimal. It ties in with the abundant evidence of counterfeiting in Southern Britain, though it begs the question of why there should be a counterfeiting operation north of the frontier when the sheer number of counterfeit third century *denarii* in Southern Britain suggests that their presence was an accepted practice despite the official sanction (Hall 2014, 183).

The second option suggests a higher degree of interaction, possibly along the lines of the third and fourth interaction and impact models set by Hunter (2007): i.e. the building up of a group or part of a group with material support by the Romans, resulting either in this group’s growth or crash, depending on circumstances (pp. 26 – 27). The counterfeit coins may have been commissioned by the local elite, to counterbalance the lack of new supply of Roman coins. Or they may have been used as currency to buy other exotic items at the nearest Roman market, depending on whether or not the use of such coins as currency is accepted or not (see pp. 52 – 53)

The evidence for counterfeits in the archaeological record of Area II is, however, thin. The exception is a stray find from the river Ken, NX66: an *as* of Faustina in a nondescript



FIGURE 28: OBERSE AND REVERSE OF COUNTERFEIT AS OF FAUSTINA, DMFM1978.110 (COURTESY OF DUMFRIES MUSEUM)



FIGURE 29: SIDE OF COUNTERFEIT AS OF FAUSTINA, DMFM1978.110, SHOWCASING THE STRIKE MARK (COURTESY OF DUMFRIES MUSEUM)

white metal, whose original, probably an RIC 1178, though the level of wear makes it impossible to identify it with complete confidence, would have been dated ca. 141 AD. The coin was judged a forgery, and thus not an archaeological loss, by Robertson (1983, 413), who does not, however, elaborate on her reasons for the assessment. The coin was acquired by Dumfries museum, where it is catalogued under accession number DM1978.110, and the staff of the museum thinks that the coin may never have been examined since its finding in the 1970s.

The coin is worn, and the patterns on obverse and reverse are best visible on scanned pictures. The obverse shows the head of Faustina, and an illegible inscription; there is a deep cut on this side, probably caused relatively recently, as the inside of the cut seems less corroded than the coin's surface and sides (fig. 28). The reverse is in poorer conditions than the obverse, and the pattern cannot be discerned anymore (fig. 28). The side of the coin presents a very clear strike-off mark (fig. 29), which reminds of the damage on the second mould from Brighthouse Bay. Without scientific dating of the coin, or an analysis of its metallic composition, it remains impossible to judge beyond doubt whether this is a modern forgery or an archaeological counterfeit, but given the relatively short distance between this coin and the moulds, and the fact that the coin was found upriver of the main river basin closest to the location of the middens should, if anything, offer ground to re-assess the coin's status. If the coin is interpreted as a counterfeit, it would offer evidence for the second reading of the mould.

Looking beyond the numismatic evidence, Area 2 does offer a wide array of evidence for contact with the Roman world. This evidence, though, is not geographically consistent: the make-up of first and second century Roman material culture from native sites is different in the eastern tiles of the region - that is, the wider context of the Brighthouse Bay moulds-, and the western ones -the area centred on Dowalton Loch, discussed above (pp. 96 – 101).

EASTERN TILES

The key assemblage in a discussion of the western tiles of Area 3 is that from the Carlingwark Hoard (64624). It was found in 1866 by two fisherman, who discovered two bronze cauldrons packed with an array of late first and second century AD items, mostly in bronze (Piggot 1952). The description and analysis of the hoard have been done elsewhere to a degree that cannot be matched here (see Gazetteer and Appendix 2 for an

overview); for the purposes of the present discussion, let us focus on the overall composition of the hoard. The items are almost all damaged, and the damage is likely to have been intentional and linked to the deposition method: i.e. the items needed to fit in the cauldron. The overarching theme of the hoard is the fact that most of the items are in iron or bronze, and like the hoards at Middlebie (pp. 91 – 92) or Dowalton Loch (below, pp. 111 – 113), it is usually considered to be a ritual deposition (Hunter 1994, 64).

The items typology, whether high status or relating to craft work, is split almost in half: 51% of the items are linked to items of personal adornment, weaponry, or items related to food consumption and preparation on a grand scale; 49% of the hoard is composed of everyday implements used in agriculture and different craftworks (table 15). This composition is remarkably different from that of the Middlebie hoard, which included only high-status items. In this regard, the fact that 45% of the total composition of the hoard is of either Roman origin or Roman typological inspiration is also striking.

Roman objects seem to have seeped into every aspect of native life, elite and common spheres alike (table 16). Craftwork implements were being replaced with Roman ones, if the higher proportion of Roman type hammerheads, characterised by circular shaft-holes, over the single example of a native hammerhead, is any indication (Piggot 1952, 28 – 40; see Appendix 2). Agricultural practices were also affected, as attested by the presence of several scythes, a tool absent in pre-Roman Iron Age assemblages (Piggot 1952, 28 – 40; see Appendix 2). Fashion seems to have been influenced as well, if the presence of a Roman buckle Piggot 1952, 28 – 40; see Appendix 2) is any indication.

The introduction of tripods and gridirons (*ibid.*) might be indicative of changes in cultural practices, as they cannot accommodate the same quantity of food as native cauldrons: if these items were replacing the latter, then they testify a shift towards smaller gatherings of select people, rather than community feasting. This shift has been noted generally in a Scottish context overall through the analysis of Roman glass vessels by Ingemark (2003), but confirmation of this trend at a local level is important in the context of Scotland, where evidence is highly varied on a regional basis. Among the remaining items, the tanged blades need to be mentioned, as they are consistent with surgical blades (Piggot 1952, 37; see Appendix 2): Roman surgeons are usually acknowledged to be the best in the Roman Iron Age period, and indeed beyond this period, though whether the presence

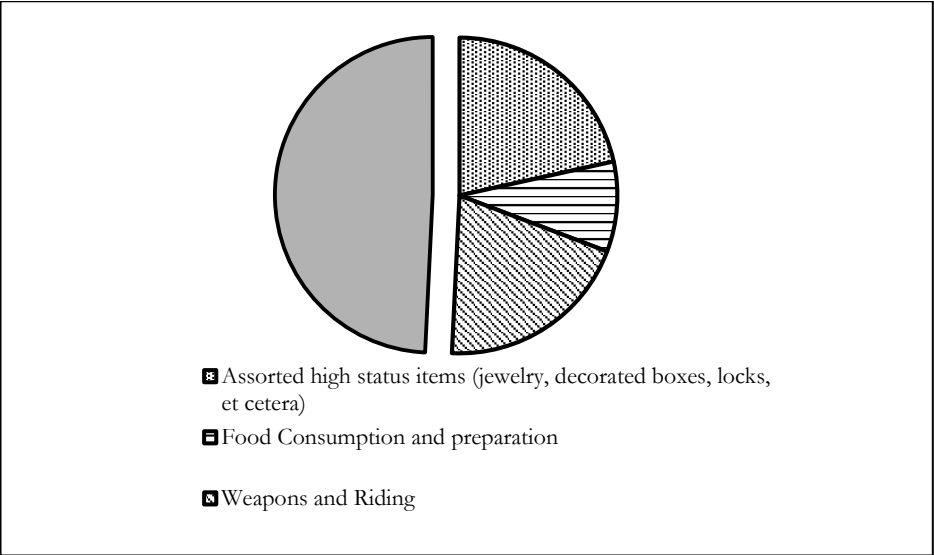


TABLE 15: COMPOSITION OF THE CARLINGWARK HOARD, BY ITEM TYPOLOGY

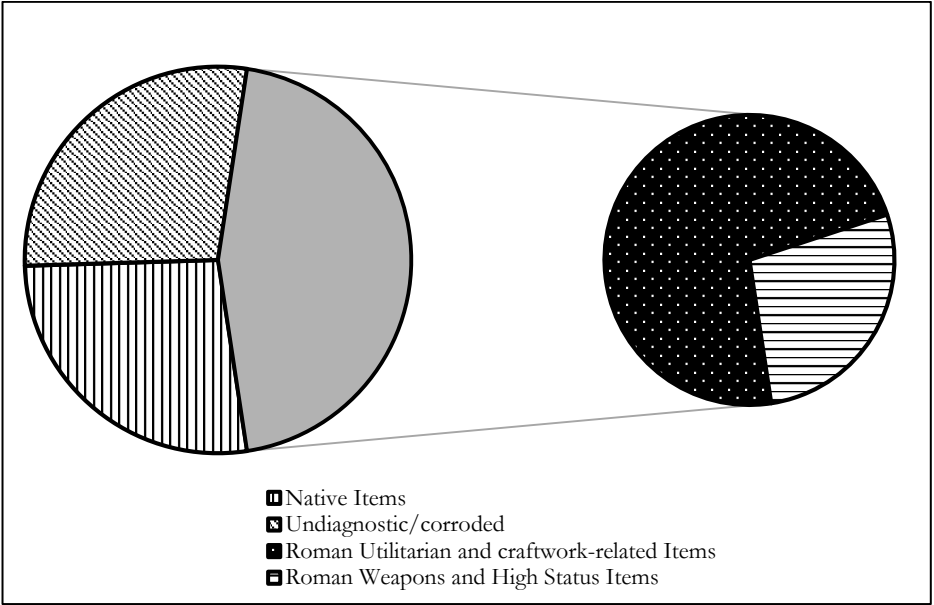


TABLE 16: COMPOSITION OF THE CARLINGWARK HOARD, BY ITEM ORIGIN

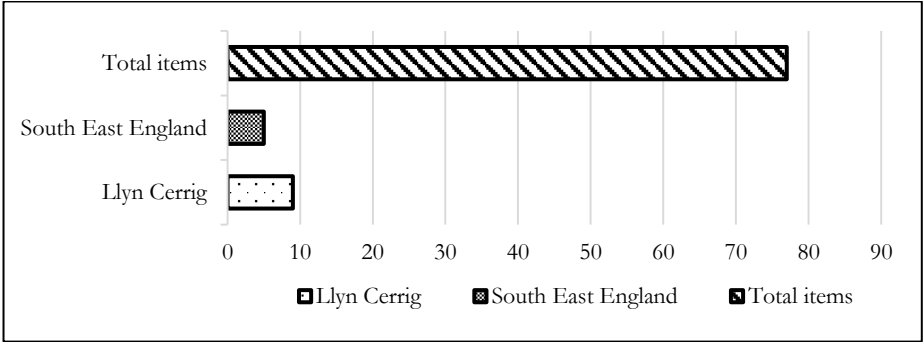


TABLE 17: NON-ROMAN IMPORTED ITEMS IN CARLINGWARK HOARD

of the blade in the hoard represents an exchange of knowledge or merely a material exchange is an unanswerable question.

While Roman material culture represents the bulk of exotic items within the hoard, there also are some non-Roman items which are not typical of the craftsmanship of South-West Scotland (table 17). These items belong mostly to two groups:

- i. Llyn Cerrig: these items constitute the most abundant group, represented by several sword tips and by a utilitarian implement such as a sickle (Piggot 1952, 11, 35); Llyn Cerrig style developed first in what is now Wales, but it had been widely adopted in what is usually considered southern *Brigantia*, i.e. roughly the modern Midlands (MacGregor 1976, 177–189), so it is possible that the exchange network was actually towards northern England rather than Wales.
- ii. Southern England: this group of items is represented by the cauldrons of Santon typology (Piggot 1952, 28,30) and possibly by the two-link bits (Piggot 1952, 32; MacGregor 1976, v.2, no. 309), which are also typical of this stylistic group; this small group of items is the only similarity between the Carlingwark and Middlebie hoards; in his analysis of the hoard Piggot had suggested migration as the most likely explanation (1952, 17–9), although he also noted how it was possible, though he personally considered it unlikely, that a trade network with southern England had been sponsored by the Romans themselves, given that during the period represented by the hoard both areas were under Roman control (1952, 17).

Beyond the hoard, the second most relevant site is Buittle Castle (5002). Buittle Castle is a relatively new addition to the landscape of excavated settlement in the sample study area, and unfortunately, it lacks, to date and to the author's knowledge, a cohesive final report. The interim reports published on Discovery Excavation outline a multi-phase settlement founded probably in the Late Iron Age, with a rich Roman Iron Age phase which has not been entirely explored, followed by the transformation of the site in a motte in the Norman period (see Gazetteer for references).

Although the site is usually mentioned in reference to its last phase, the Roman Iron Age phase is just as interesting, especially when compared with other similar settlements of this period from Area 1. The most abundant class of Roman items are by far coins (see Appendix 2), which offer an uninterrupted chronology from the Flavian period into the

third century (table 22). The most abundant coins are all dated to the late first century, and they represent, in fact, the bulk of coins within Area 2 for this period. The earlier and later coinage, however, is far more meaningful as it testifies to an occupation and interaction period far longer than anything seen in Area 1, where all Roman Iron Age settlements and fortifications seem to have been abandoned in the late second century AD, at least as far as dateable material culture allows us to infer.

The rest of the assemblage, as gleaned from the interim reports, is limited, but no less meaningful. There are some items of personal adornment, the most interesting of which is a bronze stud which may or may not have been part of a Roman military outfit (see <https://canmore.org.uk/site/65002/buittle-castle> for the best published overall assemblage and Appendix 2). The pottery assemblage is unusual: it is skewed towards coarse ware rather than fine ware, in line with the evidence from the relatively close Brighthouse Bay middens. The initial assessment is that some of the coarse sherds actually originate from amphoras (ibid.): perhaps the clearest indication of trade of perishable luxuries – like alcoholic beverages, oil or other foodstuffs- to be found in the study area. The last items in the assemblage, but certainly not the least, are two “probe-type surgical instrument” (ibid.): these items are reminiscent of the surgical/veterinary blades recovered in the Carlingwark hoard and reinforce the possibility of constructive Roman-native exchange in this area.

Overall, then, the eastern tiles of Area 2 paint a markedly different picture of interaction with the Roman world than what has been seen in Area 1: there is a mixture of fine and everyday items, which occur in sites of different archaeological nature: shell middens, a settlement and a hoard all have a high proportion of everyday items, both as pottery and as metalwork. The composition of the Carlingwark hoard had already given suspicion to Piggot of a close relationship with the Roman military population stationed in the area, and even of a possible wider Roman-sponsored trade network with Southern England, although he discounted the latter possibility in his assessment in favour of the immigration of what he thought to be a number of Icenian groups in the area (Piggot 1952, 16–19).

Trade, however, seems to be a more legitimate reading for the interaction between natives and Romans in this area: the Roman assemblage from native sites is, in fact, not that typically associated with diplomatic contact or bribery, i.e. high-status items, often of personal adornment. There is instead a high proportion of everyday object, which may

well have been available to a larger population group than in Area 1, though the spread of Roman material culture in the absence of widespread excavations is difficult to assess. From this Area, there also is the evidence from Buittle Castle, the only Roman Iron Age excavated settlement in the sample study area which seems to successfully continue on after the Antonine period: this is another break from the evidence of Carronbridge and Castle O'er. The evidence from these tiles, therefore, does not support forced interaction and hostility. Instead, their evidence can be used to construct the argument that the inhabitants of this region saw the Romans in a positive light and welcomed the new status quo as an opportunity to advance, economically as well as in other areas:

- i. Unlike in the hoard at Middlebie, the hoard at Carlingwark includes Roman objects. If we postulate that the two hoards are of similar dates, it stands to reason that there should be a meaning behind their entirely different composition. If we take into account the hostility towards the Roman world suggested for Area 1, which would explain the exclusion of such items from Middlebie, by opposition then Carlingwark hoard includes Roman items because they were considered fitting as deposition items, in the same vein as local metalwork was.
- ii. The material culture profile from all excavation suggests that the contact was not merely diplomatic, i.e. high-status items only, but also included everyday items: items which may as well have been used by a wider population segment than just the elite of the area.

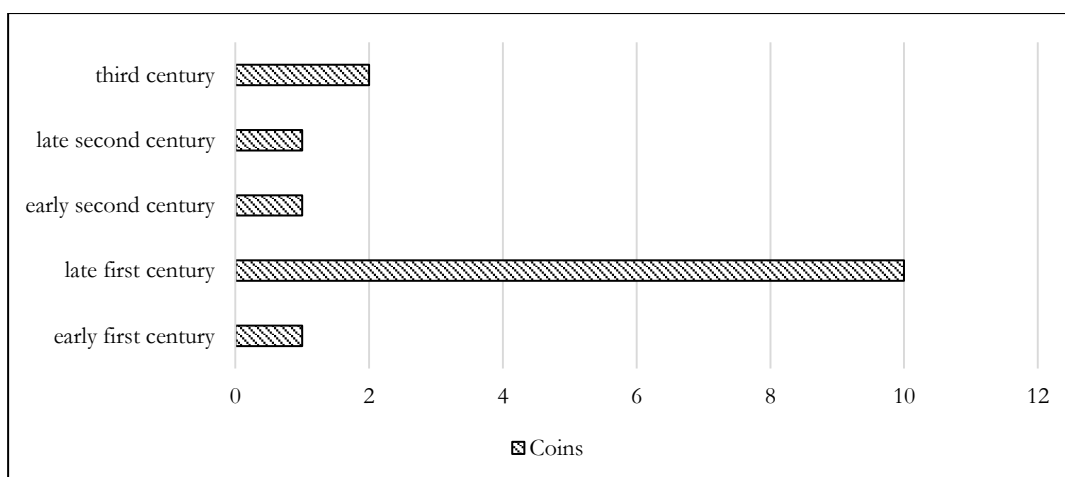


TABLE 18: NUMISMATIC ASSEMBLAGE OF BUITTLE CASTLE

- iii. At this moment in time, there does not seem to be as many military installations as in Area I, which suggests a less hostile relationship than in Area 1 at the least.
- iv. There are no sweeping changes in the settlement landscape pattern over the Late and Roman Iron Ages, in so far as has been detected archaeologically.
- v. There is evidence from two separate sites that the military and the local populations were well acquainted. In fact, surgical blades were recovered at both Carlingwark and Buittle Castle, and the latter also preserved a stud from Roman military uniforms. An argument might be made that knowledge exchange was taking place alongside material culture exchange.

The opportunity presented by the Roman world might have channelled a period of growth in the local society, which ultimately came to see Rome as a source of wealth and thus status: this provides further evidence in favour of Holmes and Hunter (2001, 173 – 174) reading of Brighouse Bay counterfeiters' acting for a local individual, meeting a demand for access to Roman markets which was no longer satisfactorily met by supply. As such, the *As* of Faustina also looks more and more like a possible archaeological loss.

However, it ought to be noted that this is simply one possible interpretation. The hoard at Middlebie could simply pre-date the period of Roman interaction, thus explaining the lack of Roman items, and the differential spread of Roman items could simply be due to the limited sample of excavated settlements, rather than a reflection of a real pattern.

WESTERN TILES

For the analysis of the western tiles of Area 2, we return to the Dowalton Loch area, already discussed above for its ritual significance in the Long Iron Age and beyond (pp. 111 – 113). This significance does not alter during the Roman Iron Age: in fact, one of the finest Roman objects in the study area as a whole has been recovered from the lake, in a context which is suggestive of deposition rather than accidental loss because of its distance from the nearby crannogs (Hunter 1994, 63). The item in question is a large Campanian bronze *patera*, or skillet, in excellent conditions, and carefully lined on the inside to aid with measurement of the contents, and decorated on the outside with a human head, circled by a ring handle (Curle 1932, 300, 374–375). The vessel's handle is stamped with the word "CIPIPOLIBI", marking the items as a product of the forge of

M. Cipius Polibius, whose work was also found elsewhere in Scotland and Europe, which permits to date the item to the first century AD (Curle 1912, 298–300, 374–375).

Beyond the *patera*, the lake has yielded several other Roman and Roman Iron Age items:

- i. Three bronze basins of unclear date, but considered Roman on stylistic similarities to other bronze basins found at Irchester and Ruberslaw (Curle 1932, 308–310, 375).
- ii. A number of fragmentary glass bracelets and a melon bead, similar to the ones from Carronbridge and elsewhere (Curle 1932, 375).
- iii. A rim sherd of Samian ware of Dragendorff type 37, dated to the late first century AD, like the *patera* (Curle 1932, 343, 375).
- iv. An unusual bronze brooch, decorated with an openwork triskele pattern, in excellent conditions (MacGregor 1976, v.2, no 253).
- v. An enamelled dragonsque brooch of Feachem (1951) class i., usually dated to the late first and second centuries AD, realized using local techniques rather than the newer techniques which had taken hold south of Hadrian's Wall, so that the enamel looks "uplaid" rather than inlaid (Hunter 1994, 55–57).

The composition of this deposition is similar in nature to the hoard at Middlebie, in that all of the items are high status, or at least decorative in nature, and in excellent condition; like the Carlingwark hoard, there is a mix of native and Roman items. Unlike either site, both metalwork, pottery and glasswork are represented.

The last find which ought to be mentioned is a small bronze statuette of Mercury (Stelloch, 62754), which was recovered within the immediate area of Dowalton Loch, but beyond the lake environ. The statuette is one of only two such items found in Scotland, and it depicts the god, holding a purse in his right hand and a draped cloak on the left side (Curle 1932, 324, 376–377). Beyond the lake environ, the Roman material culture known from stray finds and excavations, as per the methodological search criteria, is mostly represented by coins, and occasionally beads or Samian sherds (see Appendix 2): overall, these tiles have a similar profile to the Roman Iron Age sites of Area 3, with the *caveat* that their precise dating cannot be known without excavations. The only possible exception is the partially excavated Aird, close to the Late Roman Iron Age coin hoard by the same name, for which Canmore (<http://canmore.rcahms.gov.uk/en/site/60767/details/aird/>) offers radiocarbon dating in the Early Iron Age, although the validity of

these dates is unclear, since there is no mention of the specific dates or the contexts of the samples in the preliminary reports (Cook 1999, 2002). If the hoard and settlement are linked, then the settlement might suggest continuity in the Long Iron Age settlement pattern beyond the immediate Dowalton Loch area, but lack of data cautions against generalised readings.

There are both differences and similarities between the eastern and western tiles of Area 2, although the first caveat to the analysis follows what has just been written above: the geographical spread of data is limited to the Dowalton Loch immediate context, with limited data from the remainder of the region. Thus the discussion of this subzone is more limited in scope than that of the eastern subzone of Area 2. Considering that the richest context is that of Dowalton, it is probably more fruitful to compare the lake's Roman Iron Age assemblage with the evidence from Carlingwark, as they at least share the same function.

In terms of similarities:

- i. Both votive deposits include the presence of Roman items: the deposition of Roman items in symbolic contexts is not a given in the Roman Iron Age, as the evidence from Middlebie points out, so the presence of Roman exotica suggests a positive, or at the very least non-hostile, attitude towards the Roman world.

In terms of differences:

- i. The items within Dowalton Loch are all in exceedingly good condition, and in the case of the Roman objects, these are all exceptional in craftsmanship, or highly unusual: there is no evidence either from the lake's assemblage or from its environ of lower quality items such as the ubiquitous coarse wares of the eastern tiles
- ii. Local craftsmanship schools continue production, while responding to new trends, as attested by the Boreland brooch: this item might be compared to the counterfeit coins of Brighouse, but while the counterfeit coins probably pretended to be genuine, the differences in craftsmanship between this brooch and those from south of Hadrian's Wall would probably not have

escaped a trained eye: this is a flattering nod to a new fashion, not an outright copy.

It is in these differences that grounds may be found to argue that the interaction between this area and the Roman world was largely diplomatic in nature, and probably carefully controlled by the very same elite which had recently claimed 'ownership' of the symbolic site of Dowalton Loch. The inclusion of Roman material within an existing framework suggests that these items either fit in with local traditions or could be incorporated easily in the local pantheon: this transference of native meanings onto exotic objects might explain the Mercury statuette from Stelloch better than suggesting the adoption of foreign gods into the local ritual world. The dependence on the Roman world for power and status which has been proposed for the eastern tiles into the later Roman Iron Age, therefore, does not seem to apply in the western tiles.

This kind of diplomatic relationship is, in fact, what is normally envisioned for Southern Britain at the beginning of the first century AD, and it is indeed common beyond all other Roman frontiers as well, since it was a standard Roman practice to engage in a system of gift giving and recognition with friendly communities to create 'buffer states', i.e. communities, of varying social complexity, which formed an additional layer of protection for the Empire provinces against hostile communities further out (e.g. Boozer 2013). In Southern Britain, diplomatic contact is attested in Roman written sources, which describe British leaders visiting Rome, and, in fact, such diplomatic links were later used as reasons to justify military activity on the island (e.g. Cunliffe 2007; Todd 2007). That this is the only region of the study area where such an interaction can be suggested from the available evidence ought to be stressed, as it represents confirmation of the uniqueness and complexity of the community of Dowalton Loch, over that of the communities of the remainder of the sampled study area.

However, most of the above material, with the exception of some third and fourth century numismatic evidence, is all Early Roman Iron Age in date. The Later Roman Iron Age is invisible to the archaeologist in term of material culture, which, unfortunately, translates in the invisibility of native society as well, since, in the absence of other dating tools, Roman objects often function as a proxy for dating. The only excavated settlement, Rispaan Camp, seems to be abandoned around the beginning of the Later Roman Iron Age, an event which could be used to farther an argument on social instability. However,

there are many reasons why a settlement would be abandoned, such as the death of its inhabitants or the end of the buildings usable life, coupled with a decision to move to a more favourable location for economic or personal reasons. The crannogs on Dowalton Loch are thought to be abandoned in this period as well, but while there is no evidence that they were reoccupied in the Early Historic period, without additional data it is uncertain whether they were abandoned at the same time as Rispaun Camp.

If the latter were the case, then it might be possible to envision a period of instability directly linked to the withdrawal of the Roman military at Hadrian's Wall, given the close superimposition of the dates. The reasons for such an event would have to be different than those behind the abandonment of Castle O'er, if the thesis of a dissimilar relationship with the Roman world here proposed is accepted. A situation closer to that envisioned for the emergence of the Picts by Hunter (2007), i.e. the dependence of Roman Iron Age communities on the Roman world as a power base and their declining influence after the Roman withdrawal that gave rise to the people identified as Picts, could be suggested as a plausible explanation, but given the pre-existing strength of the elite who lived at these sites, it seems reductive. In the absence of evidence to clearly link chronologically the three events, i.e. the abandonment of Rispaun Camp, the abandonment of the crannogs, and the Roman withdrawal, it seems more likely that the latter was only a concomitant event in a more complex picture, and that the abandonment of the crannogs was not concomitant to that of Rispaun Camp.

SUMMARY

Area 2 can, therefore, be subdivided into two subzones: an eastern area, centred on Brighthouse Bay, closest to Area 1; and a western area, centred on Dowalton Loch, closer to Area 3. The latter area has a long history, which begins before the Long Iron Age, but there seems to be a change in its social organisation during the Late Iron Age, when the symbolic site at Dowalton Loch became the site of one or more substantial settlements: while the precise socio-cultural changes that allowed a group of individuals to symbolically claim ownership of a very old ritual site cannot be known in the absence of written sources, the shift is likely to be significant and it speaks of the strength and control of the local elite on native society. The same control is mirrored in the interaction with the Roman world, which seems to be strictly diplomatic and limited, in terms of access to Roman material culture, to a select few. Roman items do not seem to be negatively

charged, as has been suggested for Area 1, but are incorporated within the pre-existing cultural framework.

In contrast, the eastern tiles do not show the same marked shift. While at least one crannog is suspected for Carlingwark loch as well (<https://canmore.org.uk/site/64674/carlingwark-loch>; Affleck 1912), the evidence from the hoard recovered from the lake does not support the same level of control in the interaction with the Roman world: in fact, most of the hoard's metalwork comes from everyday items such as sickles and scythes, often made after Roman models. The evidence from an array of settlements agrees with this assessment, especially when all of the assemblages for the area contain more coarse than fine ware. Roman items and possibly practices may have trickled into everyday actions, as the surgery tools suggest, and Roman symbols, rather than the pre-existing symbolic/ritual pantheon, seems to have become an important element in the assertion of one's status, judging from the evidence at Brighthouse Bay and the possible counterfeit coin from the river Ken.

The interplay between these two areas may, in fact, suggests the presence of two different social structures across the southern coastline at the beginning of the Roman Iron Age, though their interpretation can differ:

- i. The western tiles represent a much more pyramidal tribal group, with a strong elite leading a socially articulate group, while the eastern tiles represent a less complex unit, leaning on the Roman world to increase their own power
- ii. The eastern tiles were more socially complex and articulate than the western tiles, and were able to sustain some kind of trade economy with the Roman world in which diverse strata of the community could participate, without the contact being perceived as dangerous for the original status quo, while contact in the western tiles was limited because of the limited capabilities of the relatively new elite.

These opposite readings rest on two opposite assumptions: the first one relies on the widespread assumption that a strong elite would have wanted to contain and control access to outside influences, in order to both assert and maintain its status. The second one relies on the assumption that multi-strata interaction with a complex society like Rome can only happen when the native society has already achieved a level of development that allows for such interaction: in the absence of such development, contact

and absorption of exotica within a Roman controlled zone will be minimal or non-existent (Roymans 1983, 56).

Of the two readings, the first one may be more accurate at the very beginning of the Roman Iron Age, but it is difficult to argue for the absence of a cohesive and at least somewhat complex society in the eastern tiles as well. Buittle Castle is certainly a case in point, as even the limited evidence available so far as shown. The evidence for the eastern tiles, however, can also be interpreted as one of growth, whereby suggesting that the trade and integration is a slow development which is being masked by the challenges of creating a precise chronology from the limited archaeological evidence. The western tiles of Area 2, on the other hand, are arguably socially complex already at the beginning of the period under scrutiny, rather than becoming more so over the Roman Iron Age. In this context, the Roman Iron Age creation of Teroy and of the other brochs may, in fact, indicate the erosion of the power base of the Dowalton Loch elite, and thus strengthen this possible interpretation. Time-depth may, therefore, be the more important factor in trying to understand the evidence from this area. Other factors, such as cultural norms which may have dictated terms of interaction with outsiders, may also be factors behind the differences between the Western and Easter tiles of Area II, but they are factors which would require written sources to be successfully discussed.

AREA III

THE LONG IRON AGE: CONTINUITY OF SETTLEMENT

If in Area 1 what dating evidence is available points to the plausibility of an agricultural boom alongside the one proposed, but unproven, for Cumbria, Area 3, like Area 2, is not affected by any sweeping settlement landscape changes in this period. There is, in fact, distinct evidence of continuity in settlement and fortification patterns across the area from before the Late Iron Age to beyond the study period. A case in point is the fort complex of Little Dunagoil (40280) and Dunagoil (40291), NS05, whose chronology is relatively well-understood thanks to excavation. Little Dunagoil is the longest-lived settlement of the duo, with a foundation date in the Late Bronze Age and a record of uninterrupted occupation well into the 13th century AD; Dunagoil was occupied only for a comparatively shorter span, between 300BC and 100 AD, and it probably acted as an annexe or extension to Little Dunagoil itself (see Gazetteer). The key advantage offered by the annexation of Dunagoil is visibility: the latter overlooks a much larger swathe of seascape and landscape than Little Dunagoil does (fig. 30). In fact, the visibility from Little Dunagoil is almost completely nil towards the south-south-west, and to most of the mainland (fig. 31). However, being higher in elevation, it would also be more exposed to high winds, which may have been a contributing factor to its shorter occupation.

Both sites, at any rate, have far better visibility towards the sea than they do towards the land: this may be linked to the economy of Little Dunagoil, which was centred on the production and trade of lignite rings, probably to be used as items of personal decoration. The lower enclosure and K trenches at Little Dunagoil and the annexed Dunagoil offer the bulk of the evidence in this regard for the Late and Roman Iron Ages, with several lignite and stone rings, armlets and discs found in both locations (see Appendix 2 and Gazetteer). The other key source of income and wealth for the area of the hillforts is represented by farming and hunting: organic refuse found in the K and A trenches of the site has shown a large amount of mature bovine bones, followed by sheep/goats, pigs,

red deer and rabbits (*ibid.*). Among this layer there also was a single horse molar, suggesting an equine presence in the local economy, though not as sources of food.

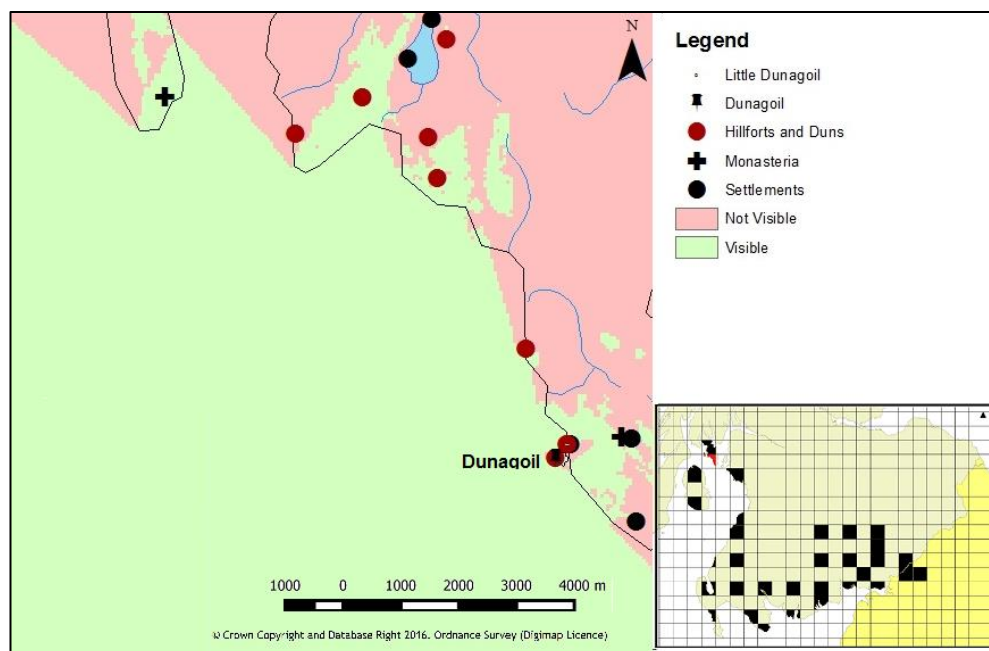


FIGURE 30: VISIBILITY FROM DUNAGOIL (VIEWSHED) (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

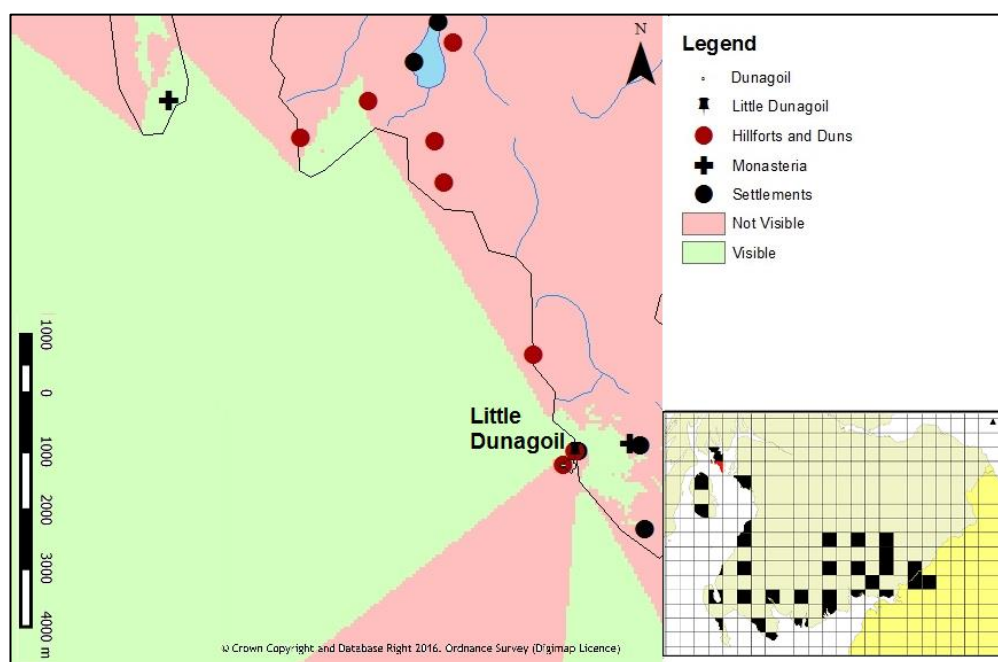


FIGURE 31: VISIBILITY FROM LITTLE DUNAGOIL (VIEWSHED) (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

Completing the economic picture, there also is some possible metalwork activity at the site complex, attested by the iron slag found in the Lower Enclosure trench of Little Dunagoil, and by the spear butts moulds from Dunagoil (*ibid.*). The trading partners of the site have not left archaeologically visible traces; as for what the fort traded for, the absence of evidence may, in this case, be a clue to the import of foodstuffs. Neither Dunagoil nor Little Dunagoil has preserved Roman material culture.

The dating window offered by the material culture assemblage is not accurate enough to detect tendencies within individual decades of the Roman Iron Age, but as a whole, there are no significant breaks in the economic production of Little Dunagoil from the Late to the Early Roman Iron Age, which suggests that there was no disruption associated with the Roman occupation. The absence of any Roman material culture may also suggest that there was no significant change in the trading partners of the site, which may themselves be outside the main sphere of interaction with the Roman world, such as Ireland. This absence, of course, may instead be caused by the limited view offered by archaeological evidence, with imports taking the form of exotic imported foodstuffs, not all of which would have needed to come in pots, or it may be due to cultural preferences.

Either way, the absence of traces of destruction, as at Burnswark, and the expansion into Dunagoil confirm the reading that the site continued to thrive during the Roman Iron Age. An alternative readings of the construction of the annexe in Dunagoil may suggest, though, that there may have been heightened social stress in this period: the additional hillfort could have been felt as a necessity to maintain a measure of control, even if illusory, over the surrounding seas, or intended as a statement of power which may or may not have been in fact available to the local elite. In the absence of ulterior evidence it is not possible to favour any of these interpretations, though it is likely that the annexation of Dunagoil was a result of a combination of all these factors: the thriving economy would have furnished the elite with the manpower and resources to build, connect and man both hillforts, while the changing political reality with the advance of the Romans may have created feelings of unease and insecurity, addressed by the additional visibility and by the statement of power and resources expressed by the construction of the new annexe.

THE NATIVES AND THE ROMANS IN AREA 3

The absence of Roman material culture is not limited to Little Dunagoil and Dunagoil but is, in fact, a trait shared by both Bute and Arran. The mainland tiles of Area 3 present, however, a different story. Unlike in Areas 1 and 2, the small numismatic assemblage offers a less reliable view of the interaction between Roman and native world: in fact, one might go as far as to suggest that the Roman world is of no consequence in the discussion of this area, if the number of coins was the only indicator under analysis. Aside from the chance discovery of a group of Roman coins whose period was not recorded, and which are currently lost (Largs, 61165, see Appendix 2), there are in fact only a handful of coins dating to the Roman Iron Age within the confines of the study area, as evidenced by the distribution maps in chapter 4. However, the picture painted by numismatics alone is far from complete. While Roman material culture is not common, it is no less complex than in Area 1, and perhaps even more so due to the lack of recent re-evaluations. Area 3 has in fact been claimed to house its very own Burnswark: the largely unknown and undiscussed defended dun at Coal Hill (41013), NS24, where a ballista ball, or something which looked remarkably like one to its excavator (Smith 1918, 133–134), was found.

COAL HILL (41013)

Coal Hill is a small substantial settlement, classed as a dun by the Royal Commission, of approximately 17 by 12 metres in internal size. Architecturally, the dun was built in dry stone, with a wall almost three metres in width; the settlement was also enclosed by a wall and additional rock-cut ditches (Smith 1918, 133–134). The site was excavated during 1901–1902, and the excavation methodology did not involve sifting the removed earth: as such, the assemblage is poor and likely incomplete, as the excavator himself recognised during publication (Smith 1918, 134). The more plentiful items are stone hammers, polishers, and querns (Smith 1918, 134; see Appendix 2): both relatively common items among Late and Roman Iron Age settlement assemblages, attesting to subsistence practices such as food-processing and the household craftwork activities.

The most unusual find, and one which has coloured Smith's entire interpretation of this site, is a stone ball, reminiscent of a ballista ball (*ibid.*). He linked this ball with a level area between the northern ditches, which he defined as a 'ballista emplacement', and explained away the lack of debris with the diminutive size of the settlement and therefore its easy disposal (Smith 1918, 133–134). However, there is quite an interpretative leap to be made

from stone ball to Roman destruction. The level area was thought not to be part of the settlement because of the lack of any find (Smith 1918, 133), but the absence of sifting of the debris can easily explain this absence; as for the ball, the lack of any description and of any contextual information within the report makes it a very suspect find on which to build a case. The ball itself could not be located: its oldest Canmore record entry suggests that all finds were handed to the National Museum for conservation, but the NMS online catalogue has no items for Coal Hill (<http://www.nms.ac.uk/explore/search-our-collections/>), nor does the catalogue of the Hunterian Museum (<http://www.huntsearch.gla.ac.uk/cgi-bin/foxweb/huntsearch/SearchForm.fwx?collection=archaeology>). Given the absence of a detailed description or drawing of the find in the report, the lack of debris from a possible violent destruction, and the absence of Roman military outworks such as those at Burnswark, this picture remains doubtful and the claims made by Smith untenable, barring a re-excavation of the site and the unearthing of new evidence in support of this argument.

AITNOCK (41205)

Let us move beyond Coal Hill to other excavated Late and Roman Iron Age sites, within and without the landscape sample. Aitnock is another dun, to the north of Coal Hill and outside the landscape sample, also excavated in the early 20th century by Smith. The dun was described as located in a strongly defensible position, with outworks consisting of a deep ditch coupled with a wall on three sides – the fourth side being naturally defended by a steep cliff (Smith 1918, 130). As for the site abandonment, Smith assumed the inhabitants left suddenly, as the site had not been cleaned prior to departure and the ashes of the last fire were still in the hearth (1918, 130).

The material culture for the site has come exclusively from the deep layer of debris above the floor of the dun, a layer approximately 15cm deep in places (Smith 1918, 131). The assemblage includes several hammerstones and other stone and iron implements related to the upkeep and maintenance of the dun, and it also contained a small Roman assemblage (Smith 1918, 131 – 132; see Appendix 2). The most notable part of the latter is the small hoard of four Roman *denarii* found together buried in the debris layer, probably bundled in something organic (Smith 1918, 132; Robertson 1970, table 1). The hoard has a *terminus post quem* in the reign of Antoninus Pius, since two of the *denarii* bear the latter's image, although it also contains two coins of late first and early second-century

date. A late first century date is also attested by a sherd from a Samian bowl of Dragendorff type 18 or 31 (Smith 1918, 132; see Appendix 2). Completing the Roman part of the assemblage is a yellow glass bead and a sherd from a coarse ware vessel (*ibid.*).

ARDEER (41069), NS24

Ardeer belongs to a class of sites which is rare within the sampled study area: souterrains. As the name suggests, this is an underground structure, and most souterrains are usually associated with storage, and food storage in particular (Hingley 1992). Ardeer, the subject of a rescue excavation in the 1970s, was well built, with a clearance between 1.7 and 2.4m, and sand from the nearby coast used to ensure optimum drainage: so much so that despite raining during excavation the site was not flooded (Hunter 1975, 297). A hearth area was found at the end of the excavated entrance passage, suggesting the presence of an undiscovered second entrance to ensure air circulation, and the floor surface was littered with iron slag: a combination which suggested to the excavator that the souterrain was built not as a storage facility but as an iron working facility (Hunter 1975, 297–299). The metalworking phase was intense, but after this phase, of indeterminate length, the site was only used occasionally before abandonment. Beyond the iron slag and some kitchen refuse, the assemblage is also comprised of a fragment of clear glass found in an undisturbed early layer, which has been tentatively dated as Roman rather than modern, though there is no other contextual evidence on which to gauge the chronology of the site (Hunter 1972, 297, 299).

CASTLEHILL (41199), NS25

The hillfort at Castle Hill was the subject of another early excavation by Smith. He found traces of a stone wall (fig. 32) encircling a defensive location with access to water, and of at least one building within a paved yard (1918, 124–125). The site is close to the fertile lands of the coastal lowlands of Ayrshire but is located on top of a high cliff, which allows excellent visibility of the surrounding landscape and seascape. The assemblage recovered from this fort is probably the best in terms of quantity and variety within Area 2, with the exception of the Dunagoil/Little Dunagoil complex.

In terms of economic activity, beyond the typical subsistence items found throughout the study area, such as querns and hammerstones, the site has shown evidence of bead-making, with different coloured vitreous canes, pipe beads and associated slag (see Smith 1918, 125 – 126; Appendix 2). There are also traces of manufacture of channel coal items

of personal decoration (ibid.). Evidence of farming, if not by the site inhabitants then in the site's environs at least, has been provided by the analysis of the rich organic residue found at the site. The bone profile is similar to that at Dunagoil/Little Dunagoil, with bovine bones forming the bulk of the remains, followed by sheep/goat, pig, red deer and horse (ibid.). There is no mention of whether the horse remains were teeth, as at Little Dunagoil, so it is unclear whether the animals were kept as symbols of status and for transportation, or as food. Evidence for the presence of wolf or dog breeds was also found (Smith 1918, 126).



FIGURE 32: REMNANTS OF DEFENCES AT CASTLE HILL

The hillfort would appear to have been, then, a thriving hub, making good use of the arable lands below the cliff, the pasture lands in the interior, and the trade opportunities offered by the coastal location. Unlike the elite of Little Dunagoil, the inhabitants of Castle Hill engaged with the Romans. The relationship between Roman and native is difficult to gauge from the assemblage, though, as the report tends to skim over precise quantities, both for Roman and for native objects, and it could not be located. As for dates, the Roman material culture recovered falls within the same brackets as at Aitnock: there are sherds from both decorated and plain Samian forms of late first and second century AD, sherds from glass vessels of second century date, and an enamelled dragonesque brooch also thought to be second-century in date (*ibid.*). There is an example of a melon bead which may be Roman (*ibid.*), but given the site was a production centre for beads it is not possible to be certain of its origin.

The stratigraphy of the site is unclear from the limited report, and Smith based his assessment on the multi-phase nature of the site on the material culture assemblage. Specifically, he proposed a first Roman Iron Age phase followed by a second Early Historic phase in the eighth or ninth century, because of a number of objects which he compared to the early excavation at the Mote of Mark (1918, 123–129). However, considering that, over time, several of his late items have proved to be Roman Iron Age (Piggot 1950, 20,27; Robertson 1970), and that the Mote of Mark site was found to be indeed Early Historic but not quite as late as the Viking period (pp. 176 – 179), it is now unlikely this site had such a secondary late occupation phase, though it may have had an Early Historic phase, of which more will be said in the next chapters. It is possible that the site was an Iron Age foundation, as indicated by traces found beneath a section of the yard's paving (Smith 1918, 124). However, these traces are not described, so it cannot be discerned whether this was an Early Iron Age or Bronze Age fortification reoccupied anew during the Roman Iron Age, thus indicating a period of economic expansion fuelled by the new socio-cultural environment, or a Late Iron Age foundation which continued to thrive in the Roman Iron Age and beyond, attesting instead to the stability and continuity of local networks. Smith (1918, 123–124) was not convinced that the site had a pre-Roman period phase, but offered no alternative explanations.

GLENHEAD (41053), NS24

Glenhead is a defended settlement site, with ramparts enclosing two conjoined spaces containing a sequence of timber roundhouses (see gazetteer for references). The site final report has not been published yet, but the interim reports on Discovery Excavation provide a fair assessment of the Roman material culture at least, which is mostly comprised of shards of glass and Samian vessels of first century production (Hendry 1968; see Appendix 2). The final season of excavation also yielded a very worn coin of early second century AD date (*ibid.*), though the terse record of it does not allow for a comparison with the context from Aitnock or Castle Hill. Economic activities at the site are not known, though the presence of crucible fragments suggests that at least some metalwork was taking place here (*ibid.*).

SEAMILL (40997), NS24

Seamill is a coastal hillfort, located near the delta of a minor river and protected with a series of ramparts and at least two wall-lines, as attested by early excavations (see Gazetteer). As far as the assemblage from the site is concerned, there are inconsistencies in the records: in particular, the pottery sherds found at the site are referred to as Roman coarse ware in later accounts, but not in the earlier ones (Robertson 1970, 225 *contra* Munro 1882). The most likely items to be of Roman origins are the shards of glass (Munro 1889; see Appendix 2). The remainder of the assemblage is similar to that from the other substantial households and settlements from the area, with two exceptions. These are some folded sheets of bronze and a small ring or pendant of unusual design, which cannot be dated by comparison to other material (MacGregor 1976, v.2, n.40). The folded sheet of bronze may imply metalworking activities, but the absence of specific craft implements urges caution.

LOST SITES/ITEMS: TILED FLOORS AND COUNTERFEITS

A settlement site and a stray find, both lost and potentially controversial, complete the picture for the Roman Iron Age archaeology of Area 3. The first one is Largs: during building works either in the late 18th or the early 19th century workers found a small hoard of Roman coins, which were lost before their dates could be recorded, and a small section of paved floor. The floor is possibly the most unusual find, as it was regarded to be Roman by the local antiquarians, and it consisted of square tiles of fired clay approximately 29 centimetres large and five centimetres deep (n/a 1879, 107). The exact location of the site

is unknown, and there is no record of the find in the small local museum managed by the local antiquarian society either. Since there also is no assessment more recent than 1864 (Reid 1864, 27–34), this possible structure is a conundrum.

The other item is a cast *sestertius* of Domitian, AD 81–96, not of Roman mint (see Appendix 2): Robertson lists it as a forgery (1974, 120), but there is no discussion of this item, nor was there any evidence for the making of counterfeits in South-West Scotland before the 1990s (Maynard 1993), as seen above (see pp. 103 – 104), so its status is currently unclear. There also are a few more stray items of personal adornment and possible Roman make found in the Stevenston Sands area (see Appendix 2), but, as they contribute nothing new to the discussion, they will not be examined in detail here. In fact, the evidence from stray finds overall is particularly limited in Area 3, including that from coin evidence.

SUMMARY

The first point to note in a discussion of the Roman Iron Age for Area 3 is that there does not seem to be any kind of archaeologically visible interaction between the Romans and the native populations on the islands of Arran and Bute, while there is attested contact especially in the second century AD in the mainland zone of this area. This is interesting with regards to Arran, which is generally inserted in the discussion of Atlantic Scotland with the *caveat* that its archaeological landscape is, in fact, different from the remainder of this region. Assuming that the mixed architecture of forts and substantial households which can be ascribed to the Roman Iron Age is indicative of a stratified society, similar to that in Area 1, then it might follow that Arran and Bute belonged to a separate unit than that in the mainland areas, as exotic imported items would most likely have found their way on the two islands, at the very least at sites such as the Dunagoil/Little Dunagoil fort complex, if the same polity occupied both islands and mainland. There is, of course, no reason why this should have been the case, especially during such an early period, and in fact the absence of any such items, the evidence for continuity in economic practices, and the continued flourishing attested by the annexation of Dunagoil in the Roman Iron Age suggests instead that the islands should be treated separately in a discussion of this period. Within the boundaries of the present discussion, the main conclusion for the two islands is that of a stable, self-sufficient society whose roots go back to the very beginning of the Long Iron Age, if not before.

Moving onto the mainland of Area 3, the first aspect to be noted is how there does not seem to be the same boom of settlement expansion which has been suggested for Area 1 (see pp. 67 – 95) on the basis of Higham and Jones (1975) preliminary interpretation of the aerial evidence from Cumbria in the Roman Iron Age, nor is there the same amount of Roman military presence attested in the previous area. A case could be made in favour of some expansion of settlements along traditional building practices, based on the fact that most of the excavated settlements with a Roman Iron Age phase seem to be Roman Iron Age foundations, but all of these settlements were also the subjects of very early excavations: while their value should not be underestimated, it is not uncommon for modern excavations to radically change the perspective on a site's stratigraphy and life based on earlier reports. In fact, the interpretations of one such report were criticised in the present context, and the reading of Coal Hill as a northern Burnswark, presented by the original excavator, has been questioned here.

Barring a discussion of sweeping changes in the settlement pattern, there is room for a discussion of the nature of contact between Roman and native groups. Most of the material culture of Roman origins come from substantial settlements and hillforts with evidence of craftwork, and by extension trade/exchange, capabilities, with the exception of Aitnock. Other sites for which a Roman Iron Age date is posited, such as Coal Hill, do not, in fact, present any hint of Roman material culture at all. There is also some difference in the overall composition of the assemblages of the substantial households and forts in the excavated group. The strongest economically is by far Castle Hill, which is also the only site with items of personal adornment of Roman origin. At all other sites the assemblages are mostly composed of Samian ware and occasionally coins, but there is no hint of exotic items of personal adornment. On this basis, it can be argued that access to Roman material culture was limited socially to a select portion of society, and partially trickled through the social network of the local populations. Largs, with its enigmatic tiled floor, might speak of a much closer relationship, and possibly of some emulation of Roman building practices or even be a Roman trading enclave built to capitalize on the Roman fleet movements along the western coast. However, the evidence from an ill-documented and lost site is a weak base on which to form any of these arguments. If the stray forged coin could be found to be a counterfeit of Roman Iron Age, then their joint evidence might suggest in fact that at least part of the higher strata of local society was

looking up to the Roman world as a source and symbol of status and power, but this must remain a possibility to explore in a future research project.

As for the Late Roman Iron Age, there is no securely dated evidence on which to form a discussion, which is not unusual in itself within a Scottish context. Smith (1918) argued that Coal Hill, Aitnock, and Castle Hill were all destroyed rather than merely abandoned. While this reading ought to be taken cautiously given the limited stratigraphic presentation of the data in the report, the small hoard found at Aitnock was certainly buried in a single event; also, all of the excavated sites, with the possible exception of Castle Hill, do not survive into the Late Roman Iron Age and Early Historic period. However, there is insufficient data to argue for a period of instability or upheaval during the Late Roman Iron Age, and the data for the Early Historic period, which will be examined below, suggests that, if such an event took place, it did not impact the development of this region in a visible manner.

HISTORICAL SOURCES

In summary, the evidence from the native settlement landscape suggests that South-West Scotland was not a unified landscape, but rather one divided into at least three, if not more, groups. Let us turn now to the historical sources, and specifically to Ptolemy's *Geography* and Tacitus' *Agricola*, to establish whether or not they can add any details on the existence and characteristics of these groups.

PTOLEMY'S GEOGRAPHY

Although the *Geography* is technically a text, because of its ground-breaking usage of latitudes and longitudes for each and every feature it lists, it is usually portrayed as a map. Anyone who has ever seen such a rendition will be familiar with the fact that all coordinates pertaining to what is roughly now Scotland are consistently off, with result that the northern part of Britain is curiously tilted to the right. This mistake is not limited only to Ptolemy's account, but derives from the meshing of earlier incomplete Greek cartographic accounts of Britain and Roman sources which, while more up-to-date, did not necessarily include enough cartographic precision to warrant a complete overhaul of the older geographical model (Tierney 1959); it also bears pointing out that there are small and not so small misrepresentation across the rest of the known world: in a time without internet and consistent, coherent datasets, errors can only be expected (Berggren and Jones 2000, 21).

Beyond the tilting, however, the remainder of the account is geographically coherent, which suggests that the account cannot be dismissed out of hand. The information related, beyond geographical features, is minimal: a list of names and cities. The names pertain to the inhabitants of specific regions: for South-West Scotland, there are mainly three listed groups: the *Novantae*, who occupied the sea-bound corner of the study area; the *Selgovae*, who lived to the right of the *Novantae*, and the *Damnoni*, who lived somewhere to the north of both (II. 3 §7-9) (fig. 33). To these groups, one might add the *Brigantes* (II.3 §9), who are said to occupy northern England. Their northern spread is unclear from the text, though an inscription dedicated to the goddess *Brigantia* was found at the Roman fort of Birrens (Robertson 1975, 98). The dedication might indicate the presence or influence of this group within the study area, or it might indicate the presence of Northern British individuals at the Roman fort, which, given the evidence for local conscriptions

already by the beginning of the second century AD, is not implausible (p. 78). Arran and Bute are missing from the *Geography* altogether.

As for the names, linguistic analysis suggests that they are all Celtic names, rather than Roman nicknames: the name Damnoni is linked to the Old Irish form *damnae*, which means ‘material’, which in turns translates Damnoni to something like “builders” (Isaac 2005, 191); the name Novantae, although it sounds suspiciously like the Latin verb *novare*, to renew, can also be based on Proto Indo-European vocabulary common to the Celtic languages as well, with the same meaning (Isaac 2005, 198); the name of the Selgovae can also be linked to Proto Indo-European forms, with a suggested meaning of “hunters” (Isaac 2005, 202). However, the use of Celtic names does not necessarily imply that these are the names that each of these groups used to define themselves at a given point in time.

The names might in fact simply derive from a Brittonic speaking guide who related the names as such: this is particularly evident in the names of some of the groups in Atlantic Scotland, whose names are P-Celtic despite the fact that their own language might not have been (Campbell 2001, 289). The main problem with this list lies in the origin of the data: as already mentioned above, it is commonly understood that Flavian-period military intelligence was responsible for gathering this information (Hanson 1991, 23–25). This does not necessarily make the information unreliable, but it does highlight that the understanding derives from information gathered for a very specific end, which was not anthropological in nature. There is now no way to distinguish whether the *Novantae*, *Selgovae* or *Damnoni* were actual polities with a sense of identity; catch-all names for varied



FIGURE 33: SCOTLAND'S PEOPLE ACCORDING TO PTOLEMY'S GEOGRAPHY (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

groups which shared similar social structures and thus had similar potential to cause strife and trouble to the occupying troops; or temporary coalitions brought on by the Roman advance or another, unknown reason.

The list of associated ‘cities’ is also ground for pause. ‘City’ is the most obvious translation of the word *πόλις*, which is what the *Geography* uses indiscriminately before prominent man-made places rather than natural features. These sites drop considerably the farther north one moves into Scotland, and several of the northernmost groups have no associated place-names at all: this might make it convenient to assume that these place-names refer to Roman forts. This possibility is also confirmed by one of the place-names mentioned in relation to a group south of the study area: the *πόλις* of *Isca*, which, it is specified, is home to the *Legio II Augusta* (II.3 §30). However, the counter-argument is that, if all of these place-names relate to Roman forts, then there should be no need to specify that *Isca*, in particular, is a Roman military fortification.

The geographical coordinates set on the map are, unfortunately, of little help to pinpoint plausible sites without a significant amount of cartographical and mathematical adaptations: preliminary attempts made using the natural features of Ireland and Southern Britain by Mintz (2009) have highlighted the technical difficulties and regional diversity inherent in such studies, but have so far offered no answer to the nature of these ‘cities’. They may refer just as easily to Roman fortifications as to important native settlements, such as Castle O’er or Dowalton Loch, or other sites yet to be found. This issue is particularly relevant to the coastal place names which Ptolemy lists for the study area, such as *Vindogara* and *Rerigonium* (II.3 §7, 9). If native, they might refer to important landing and trading sites, which would make these places and their hinterland important areas from the perspective of contact and interaction with other groups; if Roman, they might be references to landing sites crucial to the viability of the western sea routes which the Roman fleet used to patrol the island of Britain; if native sites with a significant Roman presence, they might be key sites to understanding the nature of the relationship between native and Romans in their local areas (Keppie 1989b, 18; Driscoll and Forsyth 2004, 4). Once again, there is not enough data to form a conclusive argument.

The conclusion to the question of the *Geography* and native society is that, while diversity is perhaps the only undeniable aspect of the account for South-West and Scotland as a whole, the nature of the evidence and the lack of contextual data impede any further

consideration. It is also interesting to note that the different groups noted in the archaeological analysis do not readily translate into the three groups listed by Ptolemy. The *Novantae* are possibly the exception to this general statement, as the area they are described as occupying is approximately the same area occupied by the western tiles of Area 3; but while it would be tempting to link the geographical similarities and to expand on the possible relationship between the name's meaning and the ritual/symbolic link between present and remote past evidenced at several sites in the area, the lack of any other correlation renders such identifications a forced fit.

TACITUS' AGRICOLA

The *Agricola* has considerably more to say about native society than the *Geography* has: the text contains several passages about the complexity of the natives' social organisation, and about the relationship between the Roman occupying forces and the native populations. The most important passages are in §12 and in §22. The former passage is within a larger section dedicated to introducing Britain in general. While the passage is general in nature, it is also supposed to set the scene for all of Agricola's campaigns in Britain, including the Scottish ones. As for the organisation of native society, the passage reads:

“nunc per principes factionibus et studiis distrabuntur. [...] in commune non consulunt. Rarus duabus tribusve civitatibus ad propulsandum commune periculum conventus” (§12)

“the quarrels and ambitions of petty chieftains divide [the native peoples]; [...] they have no common purpose: rarely will two or three states confer to repulse a common danger; accordingly they fight individually and are collectively conquered” (§12)

The information from §12 can thus be summed in two points:

- i. the population is divided into small groups, each with its own leader: the sentence is a contemporary confirmation of what is commonly assumed for the Iron Age of Northern Britain due to the sheer number of fortifications and defended settlements: a fragmented society.
- ii. the groups can coalesce into larger units if necessary: this is possibly the most important point from this passage in the current discussion. Tacitus was obviously referring to a coalition large enough to take on the Romans;

however, the passage provides a context for Ptolemy's groups, who are therefore more likely to represent loose coalitions rather than united and complex polities. The passage suggests that such units were rare, at least from an outsider's perspective, but not unheard of: in fact, one might suspect that these coalitions happened more frequently than it is suggested in the text, given the relative ease with which one was put together later on to fight the advance of Agricola (e.g. §27).

Tacitus might be steering the reader into looking at these uncivilized groups as ineffective from a military perspective, but he might have in fact preserved evidence that the smaller groups identified to some degree within a larger unit in times of crisis.

In a later chapter, one such coalition is said to be ratified "*coetibus ac sacrificiis*" ("by conference and sacrifice") (§27). However, this is a very vague statement: it leaves open whose conference it was, and what kind of sacrifices were made, and if these were specific only to the situation at hand, i.e. to forge alliances, or a tradition at all meetings. In fact, there is little to no information in the text, even at a generic level, about the organisation of each group: the *Germania*, another work by the same author, goes on at length about kings, leaders, priests and councils (2006b), but the *Agricola* leaves the reader guessing from an anthropological perspective. For example, in the passage just quoted it is left unmentioned who made the sacrifices, and according to which traditions. The archaeological record has preserved both hoards and bog bodies, but there are subtle geographical differences recorded in the archaeological record for both practices. Some hoards are entirely composed of items of high quality, new or almost new items, others happily incorporate everyday objects; there seems to be a shared tradition of linking contemporary settlements to the remote past in Area 2 at the very least, but no such tradition was found in Area 1 or Area 3, albeit the islands in the latter zone may make up for this with the continued usage of key sites. It also bears pointing out that the sentence might be little more than a cliché: after all, it is unlikely that Tacitus had first-hand knowledge of the actual events from a native perspective.

§22 details the third year of Agricola's governorship, during which he operated in what is now southern Scotland: the text specifies it is referring to the groups who live "*usque ad Taum*" ("as far north as the Tay") (§22, Tacitus 2006, 66 – 67). The passage opens with

an interesting sentence about the relationship between the Romans and natives in this area:

“qua formitudine territi hostes quamquam conflictatum saevis tempestatibus exercitum lacerare non ausi” (Tacitus 2006, §22 66,68)

“Overawed by terror the enemy did not venture to annoy our army, though it suffered from shocking weather” (§22, Tacitus 2006, 67, 69)

To analyse this passage, it needs to be taken down in its distinct part:

- i. The Roman army is highly effective: while this is not stated outright in the sentence, it is a logical assumption to the statement that the natives were frightened of acting against it. The assumption the reader is invited to make is likely to be that the military contingent is well trained, functioning to the best of its ability, and impressive enough to warrant caution before a hostile action. At a glance, this could be nothing more than either something felt to be a simple factual statement, but this passage needs to be understood with reference to the preceding paragraphs. Agricola inherited a less than perfect situation, and he has been portrayed as taking effective, unconventional and brutal actions in Wales when he first assumed governorship and promptly proceeded to crush a hostile group and conquer Anglesey, during autumn, when the army usually retired to winter quarters while waiting for the weather to improve, and with no fleet (§18). The reader is therefore invited not so much to admire the Roman army in general, but the military genius of Agricola and the effects of his leadership on the units under his command.
- ii. The natives are unwilling to oppose the Roman army: this idea is stated outright in the text, though in far less flattering terms. However, this sentence functions within the framework of concept i: Agricola was a commander without equal, and no lesser man could oppose him. In actuality, the only factual statement in this sentence is that there was no warfare involved in Southern Scotland before the campaign went further north into Caledonia. The lack of action can be explained by fear of retaliation, especially if words of the Welsh campaign just concluded had spread, but in this case, the interaction between the native and Roman worlds would be unlikely to be

entirely positive: fear is a poor basis for fruitful co-operation. Another explanation for the lack of action is that the area had already settled into a relationship with the Roman world, one which is conveniently glossed over to allow Agricola the honour of going beyond what anyone did before him. Recent archaeological campaigns and research projects have highlighted that this is, in fact, the case (for an overview, see Breeze, Thoms, and Hall 2009), and both the numismatic profile of the study area and the early dating of the T. H. Nepos inscription suggest that pre-Agricolan interaction is a likely scenario. Neither explanation need be exclusive, but once again, the greatness of Agricola is the point of the sentence.

- iii. The weather conditions were adverse: this is almost an attachment to the sentence, a quirk to add some detail to that season of activity. It could be a cliché: Scotland is in the far north, the very edge of the known world, and the expectation of a Mediterranean readership would be cold, wet, harsh winters. In fact, most winters in Scotland, when compared to winters along the Mediterranean coastline, would be worse by comparison. This auxiliary sentence could just function along the same lines of points i. and ii.: not even the weather can stop Agricola. In this case, the adverse weather would be a literary trope and a matter of perspective, rather than fact. However, there is evidence of increased deposition and fluvial activity during the first century AD in Dumfriesshire at the very least: there are as much as 70 centimetres of silting found between the first two phases of a Roman fort at Milton, and the second phase is almost certainly Agricolan (see gazetteer): excepting an unlikely campaign before Caesar even set foot in Southern England, it can certainly be assumed that the weather was unusually harsh even by the standards of the natives. This might, in fact, be another explanation for the lack of hostile interaction during the period in question. Still, the point remains: not even adverse weather conditions could stop Agricola.

The entire point of this sentence is, then, to praise Agricola and his abilities: anthropological observations do not feature highly in the priorities of the author.

The written sources for the period have, in conclusion, little to add to the archaeological evidence. They confirm the fragmented nature of the social reality of the Late and Roman Iron Ages, by stating implicitly or explicitly that there was more than one group, but the

social complexities of the groups are either glossed or unmentioned. The *Agricola* and the *Geography*, taken together, may sustain an argument for a fluid society capable of coalescing into larger units in response to exceptional events, which implies, if nothing else, a network within different groups and the recognition that the groups within the same network shared a common link. As to how the network worked, or the nature of the shared practices or identities, the sources are of no help.

DISCUSSION

If one wanted to summarize the evidence for the Late and Roman Iron Ages in South-West Scotland in a single word, that word would be diverse: the basic tripartite subdivision outlined in the General Patterns section of this chapter (pp. 57 – 66) has held up relatively well as an analytical tool, and has helped highlight different Long Iron Age realities and varied interaction patterns with the Roman world.

Area 1, it has been argued, is the region with the most Roman military activity and with the most possible changes during the Roman Iron Age, but it is also the region with the weakest overall evidence, and thus with the most precarious interpretation. In this area a process of appropriation and partial annexation of a previous complex society to fit the needs the Roman military has been proposed, though, admittedly, on the basis of limited evidence which may be interpreted differently. The suggested process involved a possible boom in the overall number of settlements, a significant portion of which were rectilinear in shape. There is also evidence that this region may have been subjected to a census in the pre-Hadrianic period, which would suggest a long-term interest and the potential annexation of the region despite its location north of the formal frontier line.

However, it is here suggested that the significant disruption to pre-existing power and social structures, and the new impositions and requisitions by the Roman military may have fostered a climate of hostility towards the Roman world, on the basis of the unusual number of heavily defended military installations along the major road in Annandale, running from Carlisle to Milton and beyond, of Burnswark, an open settlement which can be argued to have been sieged and destroyed by Roman forces, and of the limited number of Roman imported items, both high and low quality, in comparison with the rest of the study area, and especially Area 2. The exclusion of high-end Roman items may extend to hoards, if we can extrapolate from the record at Middlebie, and it may be accompanied by the abandonment of key native sites associated with the Roman military after the end of the Early Roman Iron Age. Arguably, the latter two arguments are the weakest. McGregor's date of Middlebie is not universally accepted, and the abandonment of Early Roman Iron Age native sites in the Late Roman Iron Age is not unique to Area 1, though it can be contrasted with the pattern proposed for Areas 2 and 3. If the proposed reading of the weaker arguments is rejected, the most that can be said on the basis of the sample evidence is that relationship with the Romans was likely hostile in some areas, though at

least some elements of the population took advantage of the situation and continued to thrive. The development of the native population after the Antonine period is largely obscured by the lack of evidence.

Area 2 can be subdivided into two zones: an eastern and western area. The eastern area does not permit discussion of settlement landscape changes; however, there is a high amount of Roman material culture, including both high-quality items and everyday items, like coarse wares, usually not found in native contexts in Scotland. Roman objects are used liberally within symbolic deposition contexts, and the demand for such items outlasts their supply, creating the conditions for counterfeiters to operate. The western area, again, does not witness large-scale settlement landscape changes in the Roman Iron Age, but the amount of Roman material culture is far more limited than in the eastern area, and while the objects are also used in ritual contexts, the items are only high quality and new. There is no evidence of a counterfeit market.

Area 3 can also be further subdivided into two zones. The islands of Bute and Arran do not witness a Roman Iron Age, as there is no archaeologically visible evidence of the Roman world; the settlement landscape does not visibly change either, except for evidence of growth during the Late and Roman Iron Age evidenced by the expansion of one of the longest-lived fortifications sites in the area, though, it has been argued, it is possible that this foundation does belie the changing socio-political situation. The mainland area witnesses the foundation of some new settlement in the Roman Iron Age, following native architectural traditions. There is limited evidence that suggests that most of these settlements did not endure for the duration of the Roman Iron Age either; their Roman material culture assemblage is, again, comprised mostly of high quality and personal adornment items, with the best assemblages found in settlements with a more complex economy.

In summary, the sampled landscape hints that native societies of South-West Scotland were not unified, neither in singular cultural practices nor in their worldviews. The settlement landscape evidence also suggests that the Roman Iron Age was a period of change and that most of the local elites at least had a close relationship with the Romans, though not always a positive one. This is largely in keeping with other recent studies on areas of South-West Scotland which are not based on sampling methodologies.

As has been noted in the Literature Review, the number of recent works specifically concerned with South-West Scotland is limited, but there is nonetheless a small number of recent projects which include South-West Scotland within their range, using different source material and/or looking at specific areas without the use of sampling. Ingemark's recently published thesis (2014) is an example of the first case. In his research, he examines all Roman glass recovered in Scotland to gain some insight as to the social changes underway during the Roman Iron Ages, and concluded that, in general, the Romans were used as a source of power, and that the local elites reshaped some of their behaviours to mimic that of their Mediterranean neighbours. Specifically, he argues that the quantity and type of glass present suggest that the local elites started having more intimate gathering using smaller glass drinking vessels and cups, thus suggesting a shift in the expression of power and status within society. His conclusions overall complement the patterns evidenced in the settlement landscape analysis carried out in this project, where a close relationship between Roman and native has been found in several of the regions of the sample study area. However, the present analysis has also highlighted that this pattern was not universal and that not all native groups were as open to the Roman worldview.

Another study that merits mention in this context is the re-assessment of the known settlement evidence for South-West Scotland on its own merit, rather than as an addition to South-East Scotland, carried out by Cavers (2008). His chief conclusions were remarkably similar to those of the settlement landscape assessment: South-West Scotland is a diverse entity which needs to be assessed on its merit as it is vastly different from South-East Scotland, and most of its landscape is far more varied than the RCAHMS survey of Dumfriesshire (1997) suggested. In particular, he also noted that broch and other monumental households usually found only in Atlantic Scotland are more likely to be direct borrowing due to contact with Argyll and Northern Scotland than Roman-induced answers to social changes (Cavers 2008, 18-19), and that the rectilinear enclosed settlement of the region are potentially different enough from those found in Northumbria that they may very well be representative of a different settlement culture, one which may even be native to South-West Scotland (Cavers 2008, 22).

Caver's research on crannogs in Scotland, which focused on the Dowalton Loch environ as a study area for the development and meaning of crannogs (2010), also ought to be

mentioned here. In summary, Cavers argues that the Roman Iron Age is a period of change during which society became increasingly more complex. An integral part of this process was the connection to the landscape and to the past, with the re-use of crannogs and with their liminal locations being used to do both. His conclusions, which he bases on a study of the complete landscape, crannogs and finds from the Dowalton area, correlate closely once again with those from the settlement landscape analysis.

The similar results obtained from non-sample based studies overall suggests that sample studies may still be used to assess large study areas. However, on the basis of the limitations of dealing with a partial dataset, as often acknowledged during the analysis, it is the author's opinion that sample-based studies are best used for initial assessment of large areas and trends, and should be used as precursors of non-sample studies specifically looking at the possible trends found by the first.

6. INTERACTION IN THE ROMAN IRON AGE

This section intends to explore the extent and manner of interaction of native societies with the Roman world and with the other groups which lived across what now are Great Britain and Ireland. For the purposes of this section, only forms of interaction which have left behind material culture remains will be considered. This is not to say that foodstuffs, animals, people and ideas are not as important, but they are not easily identifiable in the archaeological record of a proto-historical society. Traditionally, interaction thus defined is often referred to as trade, but this is an over-simplification. In fact, it is often impossible to assess exactly how foreign items have made their way into native assemblages: trade, diplomatic exchanges, bribery and raids are all accepted explanations and have often been advanced for the very same assemblages. The still on-going controversy over the nature of Traprain Law in Midlothian is a good example of this, with all of the above hypotheses, and more, having been considered for the site (for an overview, see Erdrich, Giannotta, and Hanson 2000, 452–454).

While raiding, or looting of empty sites, does not necessarily involve a significant level of constructive interaction, the remaining facets all require a degree of involvement and contact, and do not necessarily negate each other: in the Early Historic period at the latest, written records clearly indicate that traders could double as diplomatic envoys, as could other travellers (McCormick 2001, 274–275). As such, and for the purposes of this thesis, the type of interaction is not as important as its existence, as it reflects the networks along which people and ideas moved, and the choices which created, maintained and terminated these networks. The analysis and discussion of interaction are going to be divided into two sections: local interaction, i.e. interaction with the rest of Britain and Ireland, and interaction with the Roman world, be it its military or the civilian society developing in Southern Britain.

LOCAL INTERACTION

Starting with interaction at the local level, the evidence is fragmentary and limited, with often a single item left to indicate contact in any given direction across the whole period. Starting with Area 1, Middlebie hoard (Piggot 1952; see Appendix 2) is of overall native lowland origins, with the exception of a cruciform strap and terret of Southern British origin, which MacGregor argues, based on its worn conditions as opposed to the overall

excellent conditions of the remainder of the hoard, represent evidence of immigration (1976, v.1, p.180; v.2 n.72; p.220). The scale of this posited immigration is another matter entirely: Piggot argued for wide-scale resettlement within Southern Scotland of whole groups from South-East England as part of the Romanization process (1952, 17–19); but MacGregor leaves the scale of the migration and the purpose of any new individual or individuals open (1976, v.1., p.180). Assuming that their theory is correct, it is likely that this immigration was limited in nature, possibly within a pattern of interaction that saw long-distance alliances, and possibly marriages, rather than large scale. However, increased contact with southern Britain may simply be a reflection of changing trade routes due to the integration, full and partial respectively, of these areas within the province of *Britannia*. Beyond Middlebie, Castle O'er has yielded a jet bead and discs, which may also be from southern England because of their material, and a bead carved out of bauxite, probably from Antrim, in Northern Ireland (Truckell 1964, 60; see Appendix 2). However, Dumfries museum, which has in its collection the few finds from the original ground survey of Castle O'er, has no record of any of them. A brooch in keeping with the Welsh Carmarthen tradition was also recovered from Carronbridge (Johnston et al. 1994, 266 – 267; see Appendix 2), adding a third point of contact for Area 1 in the Roman Iron Age, as can be seen in fig. 34.

As for Area 2, the evidence is as scant as for Area 1, though moving from west to east, there is some possible continental influence attested in the stylistic format of a pair of iron tongs from Rispain Camp, for which the closest possible parallel is a Halstatt dated pair of bronze tongs from eastern Europe (Haggarty and Haggarty 1983, 49; see Appendix 2). A second bauxite bead of Antrim origin has been found, with no other context, at Rainton, again hinting at a possible link to Ireland (Truckell 1964, 60; see Appendix 2). Finally, the hoard at Carlingwark reinforces the link to southern England, with Llyn Cerrig native sword types and an Aylesford tankard present, and also introduces material evidence for a link to northern England in the form a mirror-handle (pp. 106 – 108; see Appendix 2).

Area 3 has not yielded any obviously Roman Iron Age items which fit in this category, despite the obvious importance of craftsmanship and trade evidenced by such sites as Little Dunagoil. There are two brooches of unique craftsmanship from the Stevenston

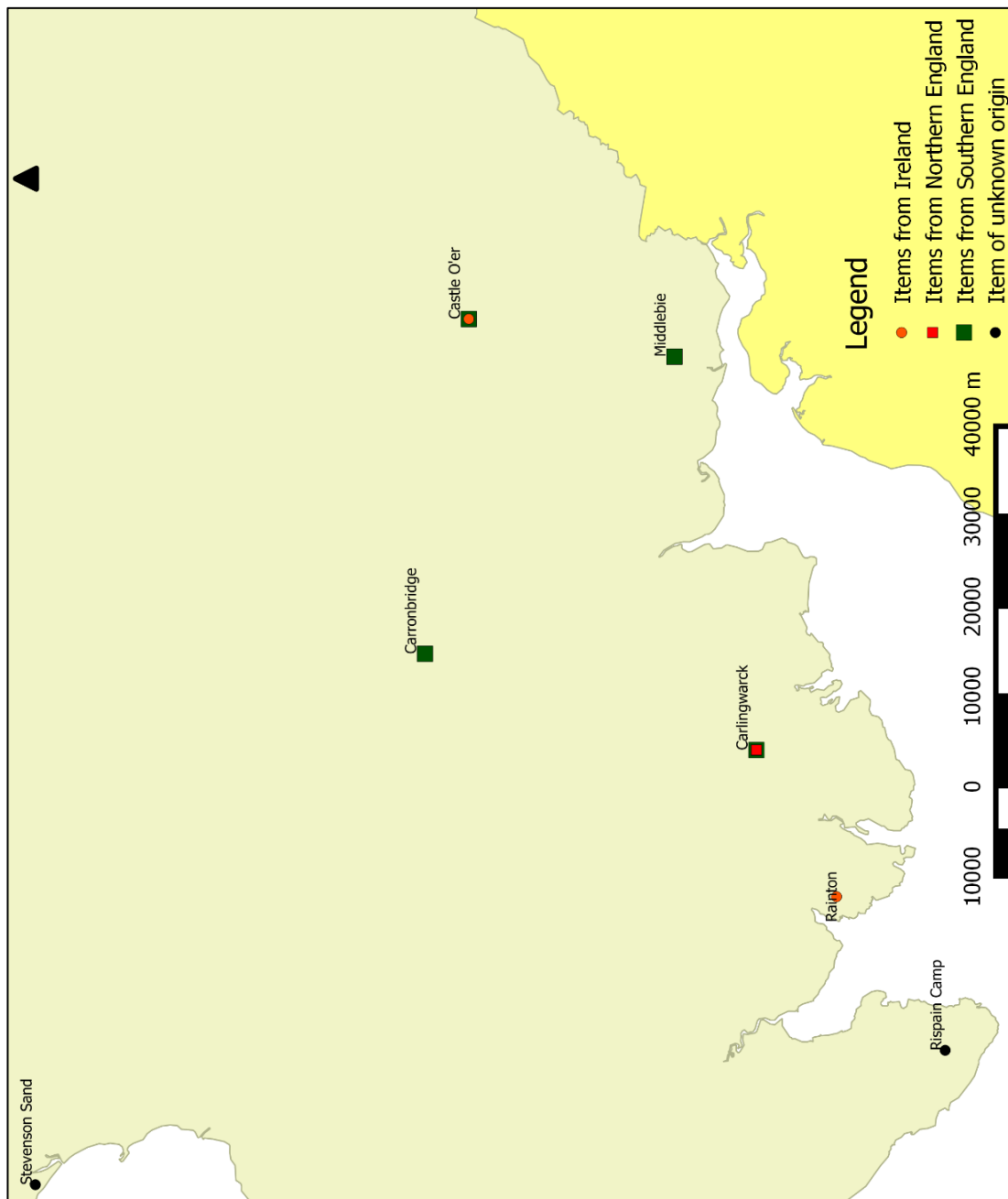


FIGURE 34: NON-ROMAN IMPORTED ITEMS IN THE ROMAN IRON AGE (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

Sands area which may attest to creativity and contact beyond the local area, but as these cannot be dated and the area has yielded several other stray finds which indicate Early Historic activity, the date range of Stevenston Sands cannot be accurately gauged (Callander 1933; see Appendix 2).

As can be appreciated in figure 34, contact with southern England is by far the most common in both Area 1 and in the eastern section of Area 2: that is, in the two areas for

which the most amount of contact with the Roman world, be it potentially enforced or locally desired, was taking place. This is the same area which sees some very limited evidence for contact with Northern Ireland and Northern England, while the remainder of the study area either does not favour trade in the local network in archaeologically visible forms, or the data has yet to be found.

The physical evidence, therefore, seems to suggest a split between the eastern part of the study area and the western half. The split can be interpreted in various ways, based on different assumptions:

- i. The split is based on practical or functionalist reasons, in this case the closest available sea-routes, and is not so much an east/west division as a division between the southern coastline and western coastline. However, the distribution of Irish items is not on the western coastline but on the southern coastline, thus the utilitarian nature of this interpretation is negated by the very distribution of the items in question. It is also necessary to remember that while practical concerns are important, the nature of the relationship between two groups always plays a significant part in any interaction (Hodder 1982, 35).
- ii. The split is a reflection of the long-term development of the region, which by the Roman Iron Age favoured different networks across the local geography. The items recovered are merely a reflection of these old networks, and while the conquest of Southern Britain and the occupation of South-West Scotland may have caused some short-term disruption, this was not terminal. This reading is viable for smaller, more localised networks, and for networks which bypass the Roman world altogether, e.g. networks with Ireland. however, it seemingly implies that the Roman conquest of Southern Britain and the temporary occupation of parts of the landscape under scrutiny had no significant long-term impact on the long-distance contact networks of native groups across the island.
- iii. The split is influenced by the Roman conquest of Britain and occupation of South-West Scotland. Contact with Northern England from beyond either the wall or the narrow stretch of sea between the two regions is likely not a new development because of geographical reasons, while contact with Southern

Britain may have indeed been boosted by individuals relocating into the region, as both Piggot and as MacGregor suggested (Piggot 1952; MacGregor 1976, 180), though it is unlikely that this was a large-scale pattern, or by Roman economic policies which made trade within the province easier. The remainder of the region, be it because of more limited Roman impact or a different daily interaction with the Roman world, either maintained older networks as in .ii, or retreated into itself, which may explain the completely unique metalwork expressed in several items, in much the same way as the disintegration of the European contact networks at the end of the Bronze Age resulted in the emergence of discrete cultures in the Early Iron Age (Cunliffe 2013, 291–293, 2015, 12–14).

A combination of options ii and iii is, in the author's opinion, the best fit for the available evidence. In other words, it is argued here that the evidence available suggests long-term contact routes being influenced in parts of the study area by Roman economic policies and, possibly, by human mobility. Albeit migration is a long-held unfashionable concept, as pointed out in the Literature Review (p. 29), there is evidence for mobility throughout human history, and, if individuals in Southern Britain felt it would have been an economic and personally successful strategy to relocate north to answer the booming food requirement of the Roman army and boost the ranks of Roman-friendly elites, then it is conceivable that immigration forms a facet of interaction within this period, though how significant is another matter entirely. Whilst several studies from other areas of the Roman Empire have remarked that economic-determined mobility, among other factors, was common, both as the result of personal choices and at a state-sponsored level (Zerbini 2015; Roselaar 2015), there is not enough evidence to argue for such large-scale movement here. A more muted scenario involving the movement of select individuals is more likely, and also more in line with overall prehistoric movement patterns, since, as Woolf points out, “migration is rarely, if ever, the movement of an entire society” (2015, 447).

The possibility of migration, on any scale, comes with its own set of social challenges, including the process of integration and the relationship between the natives and the new settlers. On a more practical side, this relationship may have influenced the level of success in farming in different climatic and geological conditions, which suggests either the need for the formation of close social ties with local communities, or the failure of

the endeavour and thus the return of the individual to the South. Both possibilities are plausible on the available evidence, and both may have in fact played a part in the success or failure of different individuals. However, human mobility is difficult to assess within the current dataset, and it is thus not speculated further, but it is a possibility that should not be discounted without consideration.

MEETING PLACES

A further question which may be asked in the context of local interaction is that of the interaction at a micro-level, i.e. interaction among the different elites who lived within the study area. In terms of material culture, this interaction is archaeologically invisible, but Tacitus has noted a possible modality of this interaction: in §27, he wrote that the different *civitates* agreed to coalesce “*coetibus ac sacrificiis*”, that is, “by conference and sacrifice” (Tacitus 2006, 76-77). This might very well be nothing but a formulaic assumption, but the archaeological dataset has, at the very least, several examples of different ‘sacrifices’ which may have formed Tacitus’ opinion. Hoards are certainly common enough throughout the British Isles and Continental Europe as a whole, with several examples from the study area having already been discussed in detail in the thesis. Beyond hoards, depositions of single high-quality items in significant places are attested at Dowalton Loch at the very least; and liminal, marshy areas in the south-western districts of the region have also yielded several bog bodies, which may or may not be dated to the Late and Roman Iron Age (Pickin 2004).

The idea of a ‘conference’ raises a more practical question: where were these conferences held? During the discussion of Ptolemy’s *Geography*, it has already been noted how the named locations may or may not all be hillforts, and how it is impossible to match the names to archaeological sites. However, these locations are only relevant if we assume that such meetings were held within hillforts or other settlements, but meeting places may have been kept separate from places of habitation. In fact, a recent overview of the settlement evidence of the Late Iron Age in continental Europe has highlighted how both practices can be found in the archaeological record (Fernández-Götz and Roymans 2015). In particular, this survey has noticed that, at least within its study area, societies which are already centralised tend to prefer the usage of specific sections of hillforts as meeting places, while decentralised societies prefer non-settlement places with a strong ritual component (Fernández-Götz and Roymans 2015, 18–19). While the research on this

topic is still too much in its infancy to use this pattern as a broad generalization, it is interesting to note that the study area, characterised overall by decentralised communities, does in fact have a site which is a potential candidate for a meeting place of the latter category: Over Rig (67422).

The site is awaiting final publication (see Mercer 1985 for the interim report), but the excavator remarked how the plan of the site is consistent with a single construction event, and that its location enables it to both completely hide whatever happened inside from the outside, and to listen to speeches, for instance, without difficulties, as the shape of the slope provides perfect acoustics (pers. comm.). In keeping with this theme, the site's internal banks are in fact similar to concentric sitting rows, while the centre of the enclosure was paved and included two upright stones set in a south-east axis. The site may also have been built for a specific event, since soon after its construction, its continuing state of repair was not considered important, as the secondary hearth set too close to the outer palisade testifies. The radiocarbon dates from this hearth and from the palisade have yielded a date range of 210 BC – AD 248, with the material culture indicating that a Roman Iron Age date is far more likely.

If any site in the record can withstand a claim to be a potential meeting site, it is Over Rig (see fig. 35 for location). However, if such an interpretation is chosen, the question then becomes why such meetings are not taking place at the fortification at Castle O'er, which was occupied during the same period, as discussed in the previous chapter. There are countless possible answers to this question. For instance, it could be argued that customs dictated at least the pretence of neutral ground for such meetings, so that hillforts, as places of habitation of a specific family and leader, were not considered acceptable. It is also possible that some of the ritual components of these meetings could not take place close to dwellings, which would explain the necessity of having a separate meeting site. It is even possible that it was traditional for the hosting group to erect a new meeting site for important meetings, as a show of power and resources. The latter reason may also explain the limited lifespan of the site. Of course, it is impossible to state beyond doubt that the site was meant to be a meeting place between different groups, but the evidence is certainly suggestive. The implications of this interpretation would also be worth pursuing further in the future, as they may shed some light on the cultural norms of at least some of the inhabitants of South-West Scotland.

Beyond Over Rig, there is another set of evidence which may be consulted in this regard: the place names themselves, as recorded by Ptolemy and by the *Ravenna Cosmography*. As for the latter, of particular interest is the place name *Locus Maponi*, recovered from an inscription at Birrens and also known from the *Ravenna Cosmography* (Rivet and Smith 1979, 395). It is unclear whether *locus* is a simple rendition of the Latin ‘place’, or a reference to the Celtic root **loc*, for ‘lake’, but *Maponus* is an Irish and British deity which appears in the medieval literature of both Ireland and Wales, and which became popular among Roman officials through its association to Apollo (Rivet and Smith 1979, 395–396).

The name has been associated with the modern village of Lochmaben (Rivet and Smith 1979, 396), west of the river Annan and in what has been identified as Area 1 (see fig. 35) for location). The nature of the site, as a mere place name, is unclear, but a crannog (66316) was found in the late 19th century in the nearby lake. The site was not explored, and thus cannot be dated securely (Black 1887; Wilson 1982), though an ard radiocarbon dated to 80 bc \pm 100 has been found in the general area of the lake (Guido 1974, 54). If the place name has been identified correctly, then the crannogs and the possible meeting place could be operating in much the same way as Castle O’er and Over Rig; especially if

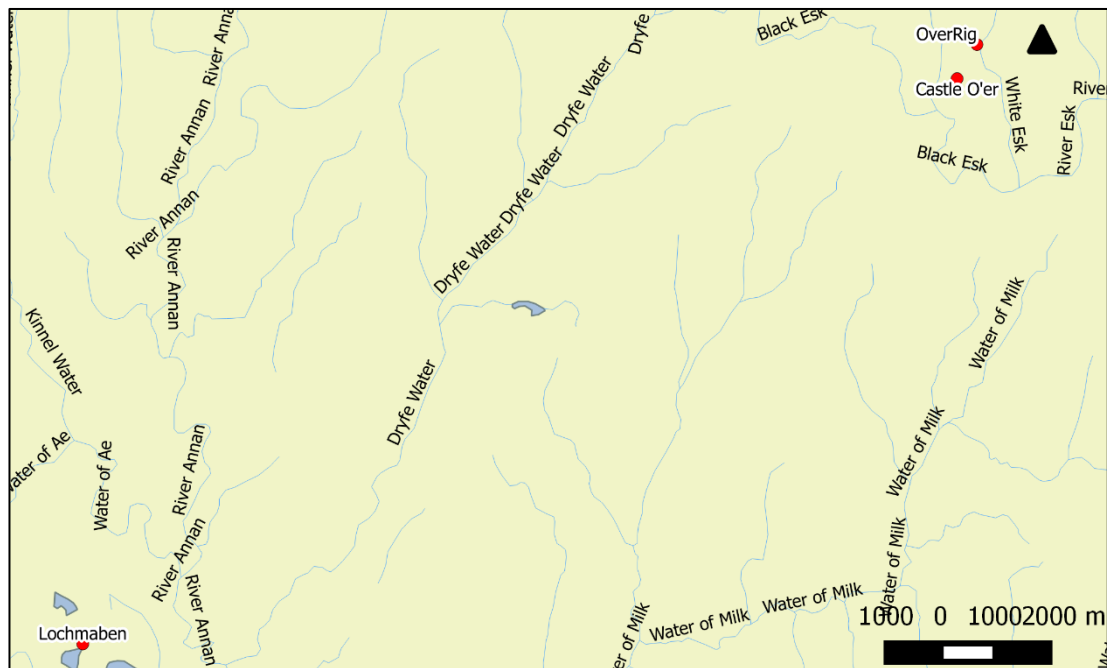


FIGURE 35: OVER RIG AND LOCHMABEN (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

the deposition of the ard coincides with a foundation event. Alternatively, a process similar to that seen at Dowalton Loch could have been taking place in the area. Beyond the realm of speculation, ritual elements in meeting places are implied from Over Rig itself, and also known through the evolution of Dowalton Loch from a ritual deposition site to a monumental household. Beyond the study area, the coincidence of sanctuaries and meeting places is known throughout Europe, from La Tène Gaul (Fernández-Götz and Roymans 2015) to ancient Greece (Crielaard 2009).

Away from Area 1, there also is another place name recorded both by Ptolemy and by the *Cosmography* for the northern mainland of Area 3: *Corda*, a possible misnomer for *Coria*, a more common place name probably linked to the Brythonic **coria*, hosting-place (Rivet and Smith 1979, 195, 316–319). However, Rivet and Smith are of the opinion that the name and location, as recorded, relate to Roman forts, which adopted the name of a nearby, and unrecorded, native meeting place (1979, 317). If the interpretation of Over Rig and Lochmaben as meeting places is correct, and if the trend for non-settlement meeting places extends beyond the confines of Area 1, then it is possible that the exact location of *Corda* may stay lost. However, the existence of such places suggests that despite the overall fragmented nature of leadership, there was a strong sense of community tying together the population of different regions.

INTERACTION WITH THE ROMANS

Moving onto remote interaction with the Roman world, the material evidence available has for the most part already been reviewed in the previous chapter. In particular, the presence and absence of material culture from hoards has already been reviewed in detail to assess the nature of the relationship between Roman and native groups in an attempt to shed some light on the settlement pattern and to corroborate the discussion on the geographical subdivision of the study area. Moving beyond that discussion, the most common Roman items from native settings, be it from stray finds or from settlements, are coins, mostly original issues aside from two possible counterfeits in Area 2 and 3 respectively (see fig. 36 for distribution), and a possible counterfeiting operation at Brighthouse Bay in Area 2.

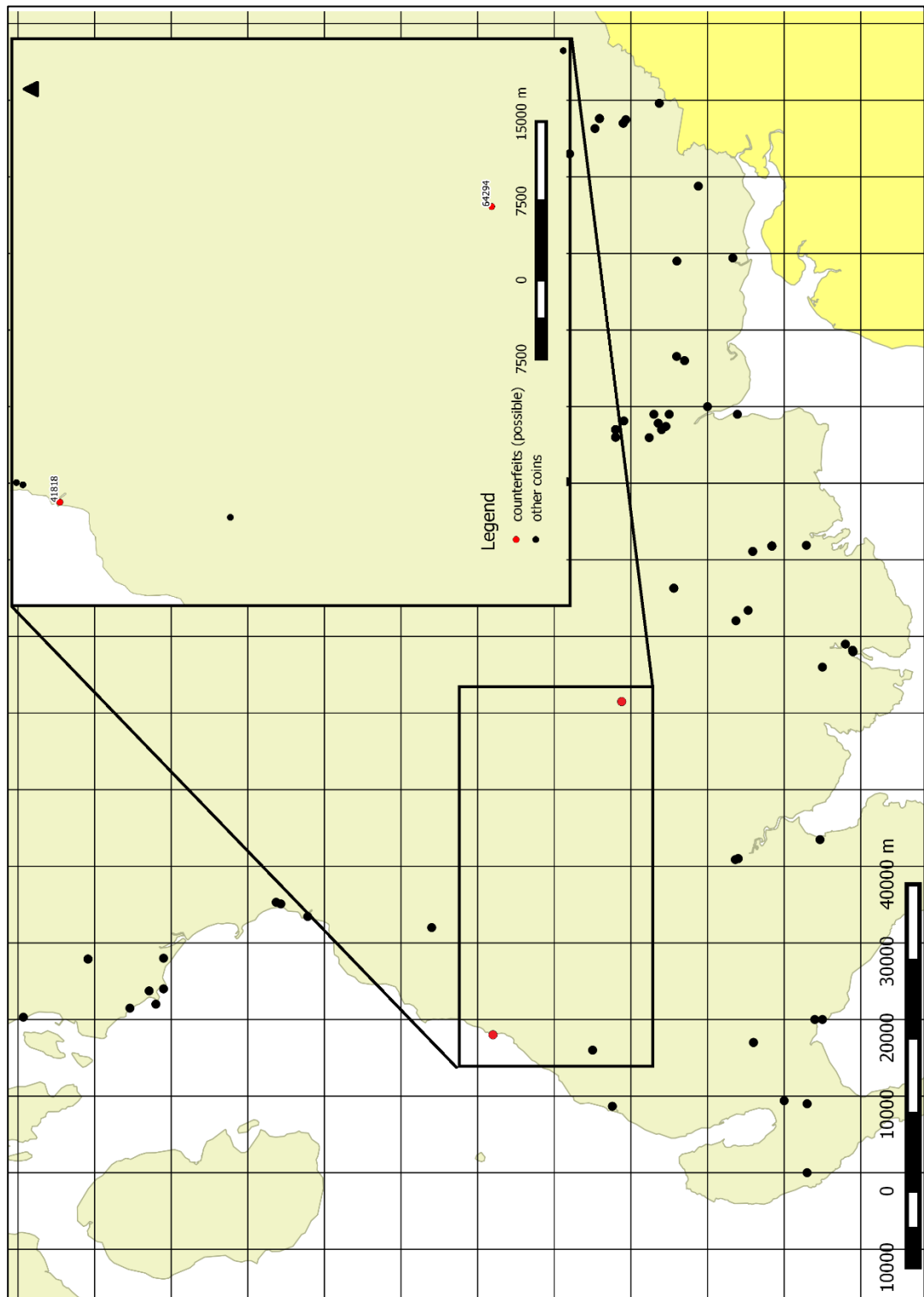


FIGURE 36: COUNTERFEITS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

In the Late and Roman Iron Ages chapter, coins have been treated either as a dating tool or as an object or symbol in their own right; however, coins in the Roman world were primarily a means of exchange, whose distribution then highlights the primary exchange – and travel - areas during the Early Roman Iron Age (see figs. 7 – 8). The counterfeit and later second century coins, in particular, might highlight which areas continued to trade with the Roman world in the Late Roman Iron Age (see fig. 9).

Assuming that the presence of coins, both original and counterfeits, relate to continuing interaction with the Roman world, it would seem that the settlement landscape is split in two: the southern coastline region, roughly coinciding with Area 2, and the coastline of Area 3, with a particular focus on its northern reaches, where the most coins have been found. In the former, contact with the Roman world is sought after enough to have a counterfeiting operation to create more capital for exchange. In the latter, there are a smattering of coins along the coastline areas and a single counterfeit, which was recovered from roughly the same area as Stevenston Sands, which was noted in the previous section as being part of a wider network whose influences are unclear. Given the paucity of the evidence, it is difficult to make sweeping conclusions. It might be argued that, especially given the disparity between a single counterfeit which may or may not be ancient and a counterfeiting operation, that contact continued in Area 3, but not to the same scale as in Area 2. Of course, it can also be argued that, as the evidence is indeed minimal, the contact may have sporadic, a one-off event, or evidence of ‘second-hand’ contact, i.e. of contact, either peaceful or hostile, with a group which was engaged with the Roman on a more regular basis.

Beyond the native-initiated Roman interaction, there is also the continuing, though, limited, interaction initiated by the Romans themselves, to maintain the security of Hadrian’s Wall and their military’s ability to effectively counter any possible raids, though, as seen above, this capability decreased significantly in the fourth century AD. The source of this kind of contact is limited once more to Ammianus Marcellinus, who wrote:

“Arcanos genus hominum a veteribus institutum [...] paulatim prolapsos in uitia a stationibus suis remouit: aperte conuictos, acceptarum promissarumque magnitudine praedarum allectos, quae apud nos agebantur, aliquotiens barbaris prodidisse. Id enim illis erat officium, ut ultro citroque, per longa spatia discurrentes, vicinarum gentium strepitus nostris ducibus intimarent.” (XXVIII §3.8, Ammianus 1910, Vol. 2 p.465)

‘He [i.e. Theodosius] removed from their assignments the “*Arcani*”, a body of men created in ancient times, but fallen gradually into corruption: they were clearly found guilty of being enticed by bribes or by the promise of large rewards into regularly informing the barbarians of our activities. This, in fact, was their function, to travel far and wide across long distances, and appraise our generals of any strife among neighbouring communities’. (Author’s translation)

Unfortunately, the book or books on Constans are lost, so this is the extent of the information on the *Arcani*. Mann links the *Arcani* to the *Exploratores*, which were the men tasked with scouting and gathering intelligence in potentially hostile territory (1974, 40). The role of *exploratores* had gathered importance during the Hannibalic war (Fournie 2004), and standing units of *Numeri Exploratorum* are known from the German frontier, which Ezov argues were tasked with patrolling the frontier area and gathering intelligence on the movements of hostile groups (1997). In this light, Hamilton’s choice to translate ‘*Arcani*’ as “secret services” in his edition of the *Rerum Gestarum* (Ammianus 1986, 357) is a plausible, if fanciful, rendition. Despite the “secret services” translation, though, it is possible that these men were in fact either openly proclaiming their Roman status, or were otherwise easily identifiable by the locals or by some of them, which may offer a secondary explanation to the accusation of corruption of the whole body: the planning of major raids may simply have been successfully hidden from the Romano-British travellers. It is probable, in fact, that by this time these men are Britons born close to the frontier itself, given the increasing practice by the Roman government of sponsoring local militias from the third century onwards (Collins 2012, 108–109). Beyond the question of their corruption, these travellers may also have brought news of happenings throughout Britain and the Roman Empire, thus functioning as a link to the rest of the world and a receptacle for new ideas during the Late Roman Iron Age.

The discussion above has focused mostly on constructive forms of interaction, be they trade or diplomacy. However, the Later Roman Iron Age saw a sharp increase in hostile activities against the Roman province of *Britannia* behind Hadrian’s Wall, as testified by the *Rerum Gestarum* of Ammianus Marcellinus (for the Latin text, see Ammianus 1910; for a recent translation, see Ammianus 1986). The references to Britain throughout the text

are limited in number and length, but on two occasions Ammianus recounts widespread raiding:

“Consulatu vero Constantii deciens, terque Iuliani, in Britanniis cum Scottorum Pictorumque gentium ferarum excursus, rupta quiete conducta, loca limitibus vicina vastarent.” (XX §1, Ammianus 1910, Vol. I p.184)

‘In Britain, during the tenth consulship of Constans, and the third of Julian, raiding expeditions by the wild Scots [i.e. Irish] and Picts, who broke the agreed peace, laid waste to the regions near the frontier’. (author’s translation)

“Picti, Saxonesque et Scotti, et Attacotti Britannos aerumnis vexavere continuis.” (XXVI §4.5, Ammianus 1910, Vol.2 p.397)

‘Picts, Saxons and Scots [i.e. Irish], and Attacotti caused the Britons constant distress’. (author’s translation)

Given Ammianus’s own identity, the focus of the effects of the raids on Roman Britain is hardly surprising, but it leaves open the question of the effect of these raids on the study area, and especially on Areas 1 and 3, which would have been more likely to be affected. The text does not explain whether or not the Picts and Scots, the name used in this period to indicate the Irish, acted alone or in concert, though either is possible. The presence of the Irish as raiders imply the usage of boats, which shifts the focus to the coastline. Without a record of the routes taken, it is impossible to know exactly what they targeted and how they reached it, though it is feasible to assume that they may have stopped along the southern coastline. These activities may explain the small scatter of Irish items found before, though if the target of the raids was specifically the much richer Roman Britain, then it may be possible that the raiders came to some kind of agreement with the local populations, such as safe harbour and re-supply, either in return of a share of the raid or with the implied threat of raiding Southern Scotland in case of non-cooperation. Both the wasting of Areas 1 and 3 and some kind of agreement are possible, and indeed they may both have occurred at the same time in different zones.

DISCUSSION

The later second century numismatic distribution mirrors too closely the local interaction networks of Areas 1 and 2 to be entirely coincidental. At the same time, the developments

in ‘remote interaction’ in the post-Antonine period, and specifically which areas continue to value interaction with the Roman world, is the converse mirror of which areas chose not to involve Roman items within depositional settings. It could be argued that the absence of coins in the Late Roman Iron Age of Area 1 is because of an economic downturn: certainly several of the excavated and dated settlements do seem to cease occupation synchronically in this period. Pollen analysis from several sources also confirms that by the fourth century at the latest there was a near-universal woodland regeneration across the southern half of the study area (Collins 2012, 134–139), which does not coincide with the later deterioration of the climate as set out in pp. 16 – 17. Considering that Area 1 is, however, the best and largest agricultural zone of the study area, it is possible that the bout of intense mixed farming encouraged by the occupation resulted in the podsolization of the soil, which has been noticed to occur in several instances on the continent after Roman occupation (Jones 2000, 22–23).

However, there is a difference between agricultural decline and complete lack of interaction with the Roman world, especially since Hadrian’s Wall continued to be occupied, in varying capacity and manner, well into the fourth century (Collins 2012, 154–155), and so did Newstead, Birrens and other forts (Hunter and Keppie 2012; Robertson 1975; fig. 6). It could also be argued that the drop in coin supply does not reflect contact with the Roman world at all in the Late Roman Iron Age, and that trade was taking place through barter and exchange instead; a possibility which is reflected in the drop of third-century coins throughout Britain and beyond. However, Roman coins continued to change hands in Area 2, which suggests that this explanation does not answer all aspects of this pattern. It cannot be maintained either that Area 3 was not suffering from the same possible economic and environmental difficulties, as it was also undergoing a phase of woodland regeneration (Collins 2012, 135–136). It stands to reason, then, there is more than a mere economic facet to the different networks which were maintained regionally.

Agency may, in fact, be a better explanation: a community’s own strategy to cope, economically and psychologically, with the changing political situation around them, coupled with the longer term issues born of the changes brought about or imposed by the bout of Roman occupation, is far more important than a mere utilitarian assessment would support. It is by the same assumption that the presence of a counterfeiting operation in Area 2 is important enough to warrant repeated mention, as it highlights that

community's choice to continue to invest in a specific relationship, a choice which may have been repeated by the community living in the northern reaches of the western coastline.

While all of the different communities which lived in the study area shared by and large a very similar social organisation structure and had archaeological landscapes similar enough to constitute a uniform cultural group with regional variants, it is in these distinct approaches that it is perhaps possible to glimpse the ghost of individuality. In these terms, there seems to be, once again, three different areas, plus the islands of Arran and Bute which have not yielded data for this analysis, which is less than the settlement analysis suggested. In short, the three areas can be summarised thus:

- i. One, roughly coincidental with Area 1, which was in close contact with the Roman world during the occupation period, through military and economic enforcement, but chose not to continue to interact further with the Roman world, at least in archaeologically visible ways, as soon as direct Roman pressure receded;
- ii. One, roughly coincidental with Area 2, which heavily interacted with the Roman world and chose to pursue the interaction even once the Roman army retreated;
- iii. One, roughly coincidental with Area 3, which interacted less strongly with the Roman world, but overall did not shun the opportunities which were open by interaction with it both during the occupation phase and during the Late Roman Iron Age.

The hypothesis of a differing underlying attitude against the Roman occupation and world based on the incorporation or dismissal of Roman items in ritual deposits in Areas 1 and 3 certainly provides an interesting plausible explanation for the subsequent choices made by the two communities, while both the settlement pattern and interaction evidence provide a reasonable explanation. The sudden change in Area 1, regardless of the economic upturn, may have been perceived as imposed rather than wanted, thus forging resentment, a feeling the basis for which was lacking in Area 2. As for Area 3, the evidence is overall too flimsy to discuss in as much detail as Areas 1 and 2 on this subject matter.

7. SOCIETY IN THE LATE AND ROMAN IRON AGES

One of the aims of this research project is to define the social reality of the Roman Iron Age and Early Historic periods in South-West Scotland. Since ‘social reality’ as a technical term belongs primarily to sociology and psychology, it may first be helpful to define its meaning and its relevance to archaeological studies and to this project in particular. Social reality in sociology is an abstract concept which relates to the interaction between individuals and the tenets of the culture in which these individuals live (Puget and Sanville 2000, 998). In other words, social reality is the modality in which individuals engage with, and are engaged by, the world around them.

As such, there are several facets to the medium of social reality, which can be summarised as:

- i. Social organisation: the nature and complexity of the organisation of the group of which the individual is a part.
- ii. Cultural norms: the wide-ranging ethical and moral rules which are shared by the group and are consciously and unconsciously expressed, reinforced, and renewed in everyday life through behavioural patterns.
- iii. Identity: the way individuals define themselves.

Even this reductive assessment shows how social reality is a wide-ranging and complex subject. In fact, even contemporary studies aimed at improving specific social realities often fail, because of the near-impossibility of thoroughly including all economic, social and political ramifications of a given situation alongside the perception of the majority of individuals affected (Cartwright 2015). Because of the fragmentary nature of archaeological evidence, the difficulties in a discussion on social reality can only multiply. However, the themes encompassed by the concept are becoming increasingly integral within the archaeological discipline, and have been considered essential in advancing our understanding of the Long Iron Age by Hunter (2007).

Because of the research design of this thesis, which was built on the necessity to explore and review South-West Scotland at a macro-scale, the data available on cultural norms is insufficient to allow for an in-depth discussion. Therefore, this aspect will, for the most part, be left unexplored. This chapter will focus instead on social organisation.

ON TRIBES

The understanding of social organisation, unsurprisingly, has long been a goal of most archaeological studies, and the emphasis placed by processual archaeologists on material culture, ecological positivism and behavioural evolution paved the way for the inclusion of social studies for this purpose (Trigger 2006, 386–394). Chief amongst these disciplines is anthropology, but despite the early inclusion of Bourdieu's philosophy of culture as the foundation of society (2004), first published in France in 1972, in Clarke's research in the 1970s, there were still doubts on the value of anthropological comparisons and modelling (1972, 40). The simplest yet most effective argument in the defence of their use was offered by Dalton: given the consistency of environmental and biological constraints, and of the basic needs of past and modern societies, it follows that it is highly unlikely for an archaeologist to encounter a past society with no possible parallel in the anthropological record (1981, 36).

The issue with anthropological models, however, is that they too are a product of the social reality of their creators, and are therefore far from unchanging. An early example of a model centred on evolutionism and the dichotomy between kinship and state society can be found in Sahlins and Service's *Evolution and Culture*. In the book the authors argue that the most important indicators are economic capabilities and social differentiation, whose interplay results in four stages of complexity:

- i. Bands: pre-agricultural societies with no social stratification.
- ii. Tribes: agricultural or pastoral societies lacking strong leaders and characterised by the importance of kinship.
- iii. Archaic Chiefdoms: socially stratified but disjointed groups.
- iv. State Chiefdoms: socially stratified groups with a defined territory and recognisable cultural practices (Sahlins and Service 1970, 36–37).

On the other hand, such models can become significantly more complex while trying to encompass a larger scale of variation. One such model is Dalton's, who compared societies to animal species in an effort to highlight their inherent similarities within broad groups and their infinite variation when taken singularly (1981). In this schema, there are only three broad groups, which he called *genus*-sets in keeping with his allegory:

- i. Stateless societies: the specific cultures included within this *genus* are all based on very small communities, each a socio-political unit in its own right, with no or little stratification. Bands such as the !Kung Bushmen or clans such as those found in New Guinea or the African Nuer exemplify the variation within this *genus*.
- ii. Tribal kingdoms: this *genus* is represented by societies largely centred on the importance of lineage and kinship, with a working, albeit primitive, system of food and craft production; a system of government often centred on a sacred king; the presence of a military or warrior class; and characteristic religious or ritual practices. The individual expressions of this *genus* are particularly varied, from simple chiefdoms to imperialist kingdoms such as the Inca, but overall no societies in this *genus* cluster present standing armies, coined money, or a large bureaucracy.
- iii. Kingdom-states: this is the *genus* which encompasses the most complex societies, the ones which present the three attributes missing from tribal kingdoms, in conjunction with a developed market and production sector; a predominant or official religion; and a territory large enough to support a large society living in a number of substantial cities. The Roman Empire and the feudal kingdoms of the European Middle Age are two examples of the various different kingdom-states in the historical record (1981, 40, table 1).

A similar view stands behind Hodder's pivotal study on division and identity among the Lozi kingdom in Africa, in which he studied the material culture patterning within and without the group in detail before applying his conclusion to an archaeological case study of a similar society (1982). However, most studies on the Late and Roman Iron Ages and the Early Historic period of the study area have not made a discussion of social reality a priority, and have followed written sources to the latter, thus talking about tribes and kingdoms without justifying the usage of these terms. Since the goal of this chapter is to explore social reality in each period, neither term appeals to the author as a suitable descriptor for social organisation on its own. In fact, Dalton's second *genus*-set is called a tribal kingdom, which points out the overall closeness between the two presumably different realities.

The thesis has avoided the question of the appropriateness of the label 'tribe' in preceding chapters, because there is not, in fact, a single definition of tribe. We have seen how Sahlins and Service define a tribe as an agricultural and pastoral group of people united by lineage but lacking strong leadership (1970, 37), while Dalton completely rejects the

usage of tribe as a noun (1981, 40). Along similar lines, Claessen states that a tribe is “neither a group of people nor a cultural unit” (Claessen 1983, 212). The Oxford English Dictionary sits somewhat in between the two positions, acknowledging a tribe as a community with a shared ancestry (OED Online 2016, “tribe, n.”).

As such, the term ‘tribe’ feels more of a catch-all word for prehistoric societies of unspecified social organisation which revolved in some way on kinship: a trait which is almost universally shared by pre-state societies and does, therefore, add very little to our understanding of the intricacies of their social organisation. As for the study area, the term is often considered as endorsed by the primary sources. It is then to their analysis that the study turns next.

ON SOCIAL ORGANIZATION IN SOUTH-WEST SCOTLAND

WRITTEN SOURCES

The main text to hold any information on the social organisation of the native populations in this period is Tacitus’ *Agricola* (2006a). The biography includes a short passage, meant to set the tone for Agricola’s campaign in Northern Britain and Scotland, which is the most relevant to the present discussion. The passage has already been partially discussed in the Late and Roman Iron Ages chapter (pp. 136 – 137) from the perspective of intra-group unity under specific circumstances, but it is nonetheless worth quoting it again in its entirety:

“olim regibus parebant, nunc per principes factionibus et studiis distrahuntur. [...] in commune non consulunt. Rarus duabus tribusve civitatibus ad propulsandum commune periculum conventus” (§12, Tacitus 2006, 48)

“Originally the people were subject to kings, now the quarrels and ambitions of petty chieftains divide them; [...] they have no common purpose: rarely will two or three states confer to repulse a common danger; accordingly they fight individually and are collectively conquered” (§12, Tacitus 2006, 49)

The first point to be noted is that the current prevalent social organisation system on the island is simpler than it used to be. Tacitus does not offer precise chronological statements beyond the general opposition of the adverbs *olim*, ‘then’, and *nunc*, ‘now’, nor does he offer recognition to his source, so that it cannot be ascertained whether he is referring to

a previous conception of the region by outsiders, which may or may not be accurate, or to native memory or legend. It is, however, worth noting that newly conquered regions which were significantly less developed than the Roman Empire suffered social, cultural and economic disruption in the period between the conquest and full integration. One such example is northern Gaul, where the period ca.50-20 BC was characterised by a massive drop in population and the loss of the previous leadership class (Brandt and Slofstra 1983, 56–58). In this case, the reference to a trend towards fragmentation and simplification of social divisions may not apply to Southern Scotland, as the direct occupation of the region was in its infancy during Agricola's governorship. On the other hand, the sentence is meant as a valid descriptor and introduction to the situation of the region in which Agricola is going to operate, so the negative trend may be related to unknown internal causes and be, in fact, a valid assessment.

The second point to be made regards the implication of the terminology used to indicate native leaders. Tacitus calls them *principes* as opposed to *reges*. In terms of semantics, the difference is subtle but meaningful: while the full extent of the word *rex* in Latin will be discussed in the context of social organization in the Early Historic period (pp. 220 – 221), the core difference is that a *rex* is a ruler, while a *princeps* is a leader (Perseus Digital Library, 2016). Rome itself was described as having had *reges* before the Republic, who held economic, ritual and military power. The area classically known as *Germania* is also described by Tacitus as being governed by *reges*, who also controlled the warrior assembly, the judicial assembly and were closely integrated into the local belief system, though not priests themselves (§7, 2006b, 140-141).

While a *princeps* can, in theory, refer to a prince and thus be related to the same semantic concept in imperial Latin (Perseus Digital Library, 2016), its core meaning, and indeed its meaning in a context of opposition as implied by the grammar of the passage, is that of 'prominent person'. Even Calgacus, the leader of the coalition which attempted to check Agricola's advance, is later introduced as a *dux*, which is largely a synonym of *princeps* with a stronger emphasis on military leadership (Tacitus 2006, §29, p.78). Tacitus is, therefore, implying that the scope and power of each polity, and of each leader, within the region is limited.

The Latin nouns *princeps* and *rex* are therefore far more semantically loaded than their plain English translations of leaders, or worse still petty chieftains, and kings. When used

specifically for their underlying implications they are in fact good descriptors for two systems of leadership associated with two close but different levels of social organisation. Looking back to the section on anthropological models, both terms refer to different declinations of either ‘archaic chiefdoms’ or ‘tribal kingdoms’, but the implications of these declinations for our understanding of native societies are important.

To honour these differences, these two different models will be referred from here onwards as multiple-leadership and single-leadership polities. ‘Multiple-leadership group’ describes a society referred to in the *Agricola* as a *princeps*-led group: that is, it will be used to define fragmented societies with several leaders, each of which has a limited hold but significant ties to the others, which allow them, if necessary, to temporarily coalesce under a single leader. ‘Single-leadership group’ describes instead the type of society whose leaders might have been called by the *Agricola* and *Germania* ‘*reges*’: that is, it will be used to indicate a society where the individual leaders have achieved a larger level of control, through either economic power or the appropriation of a ritual/belief system. It is worth pointing out at this juncture that most *reges* of classical sources would usually have had much larger powers and sway than those of the leader of a single-leadership group, but even in classical sources, not all *reges* are leaders of a kingdom: in other words, the presence of a ‘king’ does not automatically imply the existence of a kingdom-state (Goetz 2003, 6).

ARCHAEOLOGICAL EVIDENCE

The archaeological evidence for the Late and Roman Iron Ages has already been presented, so all that is necessary here is to review the data and highlight the facets which are of most use in discussing social reality. Namely, these aspects are:

- i. Settlement hierarchy;
- ii. Economic specialization;
- iii. Imported material culture.

As more data becomes available through new research and excavation, it is doubtless that more potential markers of complexity may be discussed: such as the expression of status in death; the ability to command labour for shared monuments; or even the cosmological outlook reflected in the internal layout of dwellings and the material culture contained therein. However, the three aspects listed are those for which the project has gathered the most data. Their discussion will follow the regional tripartite subdivision argued previously for this period, i.e. Areas 1, 2 and 3.

The archaeological evidence of Area 1 can be summarised thus:

- i. Settlement hierarchy: beyond the chronologically non-specific presence of a variety of settlement of diverse nature, Area 1 offers definite evidence of settlement hierarchy, as exemplified by the example of Castle O'er and the other similar configurations present across the region. However, it is unclear how much sway each hillfort actually had, and what was the level of interconnection among the many different hillforts. It is also difficult to assess how much this is a development which began in the Late Iron Age, or something fuelled by the Roman administration, or if both statements are concomitant.
- ii. Economic specialization: the evidence is limited, especially since Castle O'er was not excavated in its entirety, but it seems that the central hillfort at least was not involved in cattle rearing, like the satellite settlements. The other few excavations, such as Carronbridge and Boonies, attest to the preponderance of mixed farming. Economic specialization among different settlement types seems therefore limited.
- iii. Imported material culture: most of the items are of Roman origins, and of overall either high quality or of personal adornment value, although they are few in number and seemingly excluded from ritual contexts, which may be used to argue for a deep-seated hostility to the Roman world in this region.

The eastern sites of Area 2 can be thus described:

- i. Settlement hierarchy: the data is skewed towards single homesteads of similar relative hierarchy, albeit the excavated dataset is too small to be conclusive.
- ii. Economic specialization: judging from the implements recovered both in the hoard and at Buittle Castle (65002), mixed farming represents the staple economy of the region; there is no recorded evidence of other activities, aside from that of the aforementioned counterfeiters located at Brighthouse Bay.
- iii. Imported material culture: unlike in the remainder of the South-West of Scotland, it seems that imported Roman goods, by far the most abundant type of non-local items, are pervasive across society.

The best evidence for the western zone of Area 2 comes from the hinterland of Dowalton Loch. The area around the lake is characterized by a trend towards continuity and offers more information regards the social organisation markers than that of the eastern tiles:

- i. Settlement hierarchy: while the same typological and chronological considerations as seen for the eastern zone of Area 3 also apply in this zone, the foundation of a crannog or crannogs over the ritually significant Dowalton Loch suggests the pre-eminence of these settlements and their dwellers by extension. It is also possible that overall importance was expressed through symbolism such as the ritual deposition of ancestral items in, or close to, settlement ditches, as might have been the case at Rispain Camp. However, such symbolism is not immediately visible without excavation and secure dating for occupation periods, so the geographical extent of this cultural trend is unclear. The place of Teroy and of the other brochs in this region remains ambiguous, though they might represent a break from this tradition (see pp. 97 – 101).
- ii. Economic specialization: this subset of evidence is ill-represented in this zone. Rispain Camp offers evidence for mixed farming and metalworking; and the newly discovered mine at Tonderghie (300136), still to be published (Pickin and Hunter 2008), suggests another avenue of economic income, but there is not enough evidence to compare different settlements and their economic activities.
- iii. Imported material culture: unlike the evidence from Carlingwark, the depositions within Dowalton Loch suggest that imported Roman items are limited in quantity and high in quality, which has been used to argue for the existence of a separate group with a strong, central elite, as opposed to the diffused presence of imported items in the eastern tiles of Area 2.

Moving onto the islands of Area 3, the three markers stand thus:

- i. Settlement hierarchy: settlements seem to be characterised by dispersed single homesteads, for the most part substantial in nature, interspersed by a limited number of hillforts, one of which at least was definitely occupied throughout the Late and Roman Iron Ages. The differentiation in status among individual settlements seems, therefore, to be on similar levels to Area 1.

- ii. Economic specialization: most of the single homesteads seem to be engaged in mixed farming, with particular emphasis on cattle rearing, judging from the enclosures associated with some of these sites (pp. 63 – 66). The bulk of evidence for craftwork, with a strong emphasis on the production of shale jewellery, comes from Little Dunagoil, which might suggest a degree of economic differentiation between hillforts and homesteads, but the extent of economic specialization between different sites can hardly be extrapolated from a single site.
- iii. Imported material culture: the presence of Little Dunagoil notwithstanding, either the trading network was eminently local or the items exchanged for the shale armlets and rings are not archaeologically visible. Either way, given the lack of attested imports, this marker cannot be discussed.

The archaeological evidence for the mainland region of Area 3 is as follows:

- i. Settlement hierarchy: there is no clear micro- or macro- configuration of sites such as in Area 1; the evidence overall is consistent with dispersed homesteads and hillforts as seen in the insular zone of Area 3.
- ii. Economic specialization: unlike the preceding Areas, there is evidence of economic specialization beyond the dichotomy between mixed farming and crafting, with different hillforts specializing in different production types. The proximity to the coastline of all of these hillforts suggests the importance of sea trading for the northern mainland coastline as well.
- iii. Imported material culture: unlike in the insular zone, there is some evidence of interaction with the Roman world, but the evidence is too limited to offer a productive assessment. It is worth noting, however, that the Roman material culture is distributed across both coastline and interior, farming and craft-working sites.

DISCUSSION

The uneven picture of the archaeological record can be subdivided into three general groups. The first group includes the majority of the study area: the eastern zone of Area 2 and all of Area 3. Differentiation in both settlement hierarchy and economic specialization is present in the archaeological record, but limited in its extent; while the dispersal of trade items is equal across the societies of these areas, whether by inclusion

across different settlements and/or in all areas of life, or by near-complete exclusion. The second group coincides geographically with Area 1. This is the group which is most difficult to discuss, not because of lack of evidence, but because the society which is reflected in the settlement landscape has been significantly influenced and re-shaped through interaction with the Roman world. As such, it is unclear if the complexity described is a new development fuelled by the attempted integration of the area into the Roman province of *Britannia*, and thus a step up in social complexity, or the Roman exploitation of an existing nuanced society.

The third group is located in the western zone of Area 2, and is, seemingly, the most complex. The limited archaeological data makes it difficult to assess economic differentiation between different settlements and their hierarchy, but there seems to be a distinct link between ritual and settlement importance, as the crannogs on Dowalton Loch and the settlement at Rispain Camp attest. While the dispersal of Roman items confirms the distinction between the elite and rest of the social group, the ritual component suggests that the power of this elite was not simply based on charisma but also on a belief system. The exact nature of the latter is difficult to establish without native written sources, but the usage of Bronze Age metalwork and human bones in Rispain Camp could be used to argue for the significance of ancestry. However, it also seems that at some point during the Early Roman Iron Age a new elite, characterised by the usage of brochs, begun to challenge the pre-eminence of Dowalton Loch.

Looking back to the two broad social organisation templates argued for on the basis of the historical sources in the thematic section, the multiple-leadership model is a plausible description for the patterns seen in the first general grouping, the one which incorporates the eastern zone of Area 2 and Area 3. The leaders occupied the hillforts and were usually either involved in or patronizing non-subsistence economic activities; while the majority of the population farmed the surrounding lands from the single homesteads which dot the landscape. The number of hillforts attests both to the high fragmentation and to the inherent internal instability of such a system.

On the other hand, the third grouping described, the one which coincides with the western zone of Area 2, seems to have had a more complex system which was built on the religious or ritual importance of Dowalton Loch at the beginning of the period under scrutiny. This area also sees several hillforts and settlement sites which could have housed

leaders and were not entirely dedicated to farming, but if we follow the assumption that the elite structure had appropriated and used the local belief system as a legitimisation mechanisms, then it would be possible to see a settlement hierarchy even amongst such sites, for instance between the crannogs on the Loch itself, and the possible indication of the belief system through the ritual deposition in the ditches of Rispaín Camp. In this case, therefore, the group may be described as a single-leadership community, at least until the emergence of the brochs. It should be noted that the eastern section of Area 2 may also have been heading in the direction of a single-leadership community, as it has been suggested that there could be crannogs in Carlinwark Loch too. However, a difference can be seen in the nature of the deposition patterns: at Dowalton Loch, high-status items were sacrificed to supernatural powers by the elites, likely on behalf of the community and probably during very visible rituals, thus cementing their power. At Carlingwark, the deposition was a communal effort, so that it would have been far more difficult for a singular individual to claim having garnered the favour of their deities on behalf of the community.

Area 1 is the most difficult to gauge, because of the significant settlement landscape changes which take place during this period. If we follow the unlikely option that the landscape pattern is a reflection of centuriation, then the superimposition of a Roman ideal onto the native landscape makes the social reality of this area almost impossible to read. If, instead, we assume that the pattern is a merging of a slowly coalescing society which the Roman administration chose to exploit, and in the long term disrupt, then it may be possible to argue that this area was moving from multiple to single-leadership during the beginning of the Early Roman Iron Age. As for the post-Antonine period, the overall lack of data makes it very hard to discern what was happening socially, beyond the indications of collapse offered by the abandonment of previous settlements and the growth of forests in previous farmlands.

It would, therefore, seem that the initial tripartite subdivision argued in the introduction of the archaeological landscape of this period, and then broken down further in the chronological analysis, is actually reinforced by the differing patterns of interaction. It is also significant that, at least in two out of the three cases, it is possible to argue within this interpretation that the consequences of the choices made in this period are long-term. The element of inheritance reinforces the existence of distinctive group identities.

Identity requires a name to distinguish the self from the other, and in this respect, the tripartite group subdivision hinted at by Ptolemy's account (pp. 133 – 136) looks now significantly less improbable. The already described concerns over the stability and nature of these groups as recounted by the military sources are still valid, but there may have been a much more stable element to these groups, at least when interacting with the truly other, such as the Roman world. Indeed, it is also worth reiterating that the names of the groups have Celtic roots. It may also be worth stating that, elsewhere, some of these groups survived at least linguistically to become possible Early Historic 'kingdoms', such as the *Votadini* group in the Lothians which went on to become the *Goddodin* people immortalized by Aneirin (1969).

As for the divergences between the settlement analysis and the interaction analysis, the key to explaining the two may be in the subjective perception of each group: Jones has remarked how identity is far closer to a subjective sense of unity against an objectively diverse reality than the culture-historical approach maintains (Jones 2007, 45–47). In other words, the parameters against which each group measured their sense of self were not simply objective differences in the ritual expression, settlement pattern or local expressions of power as analysed before. This may also explain the apparent closeness of the western and eastern zones of Area 2, for which different social organisation models have been argued.

In conclusion, the social reality of the study area as sampled is characterised by three distinct groups, which follow geographically the same boundaries of the three Areas against which the Late and Roman Iron Ages landscape was analysed. These groups are not united as a single entity, but rather are formed by loose units, led by individual leaders who had limited powers and were probably not ritually sanctioned: a social structure which is here referred to as multiple-leadership polity. The western zone of Area 2 and possibly Area 1 are the exception to this picture, as in both areas the leaders have built upon the local belief system to build their power over that of other leaders: a structure which has been here called single-leadership society. Within this common matrix, the combined evidence for both local and remote interaction reinforces a tripartite division, one where each group made different choices based on their own unique world-view and reflected in the networks which were and were not exploited, especially the Roman one.

8. NATIVE LANDSCAPES IN THE EARLY HISTORIC PERIOD

The Early Historic period, i.e. the period that follows the end of formal Roman control in Britain, traditionally begins in the fifth century and ends at the turn of the first millennium AD. As the native communities of South-West Scotland are the subject of this work, the beginning of the Early Historic period within this framework is advanced to the mid-fourth century, reflecting patterns of native-Roman relations described in the previous chapters. Likewise, the analysis chronologically ends in the early seventh century, the time during which the Anglo-Saxons kingdoms of Deira and Bernicia expanded into Southern Scotland.

In South-West Scotland, the Early Historic is a challenging period, for which the already quoted comment by Childe that “the Dark Ages are even darker to the archaeologists than they are to the historian” (1940, 23) is still accurate. In fact, beyond a handful of excavated defended settlements and hillforts, there is a generalised lack of diagnostic material which impedes secure dating and thus identification of sites (Harding 2004b, 205). In terms of religious Christian sites, as will be seen in the discussion, these are mostly founded at the very end of the period analysed here, and there is no obviously Christian material culture within the study area with which to chart the possible spread of the religion.

It has, therefore, proven impossible to replicate the macro-analytical approach used for the Late and Roman Iron Ages. The analysis, instead, will be based primarily on a micro-analytical scale: it will be centred on the key excavated fortifications known or suspected to have an Early Historic pre-Anglian phase, with a particular emphasis on their location and on their trading network. Religious sites, despite their non-Early Historic dating, will also be looked at in the second section of this chapter, as the location chosen for their foundation can be useful in a discussion about the settlement landscape and societies of the preceding decades.

THE SECULAR LANDSCAPE

EXCAVATED SETTLEMENTS

LITTLE DUNAGOIL (40280)

In the sample study area, there are only three excavated and published settlements of possible Early Historic date: Little Dunagoil (40280), the Mote of Mark (64911), and Trusty's Hill (63641) (see fig. 37 for distribution). Of these sites, Little Dunagoil has already been mentioned in the previous chapter (pp. 121 – 123), since the site is Late Bronze Age foundation with a significant Late and Roman Iron Age phase. In summary, the site has been found to be a thriving production centre of shale and lignite jewellery with extraordinary visibility of the surrounding seascape, rivalled only by its annexe on Dunagoil (fig. 30 – 31), which, however, has long been abandoned by the Early Historic.

The evidence for the Early Historic period comes mainly from trench B, and, unlike the evidence for the preceding and following periods, it is more limited and tentative (Marshall 1964; see Appendix 2). There is some material hinting at the continuing production of lignite rings and metalwork items, but this evidence is quantitatively minimal. Likewise, there is a possible E-ware fragment from the Longhouse trench (see Appendix 2, Household Utensils and Furniture) hinting at the possibility that the site was still trading and may have become part of the long-distance trading network which linked the western coast of Britain with the continent (Campbell 2007; Duggan 2016), however this trench primarily contains material culture and architectural forms dated to the ninth century and beyond, so it is unclear which chronological context this pottery fragment refers to (Marshall 1964, 47). Campbell also notes that E-ware is very similar to Early Medieval white gritty ware, so this single sherd cannot be used to argue a link between Little Dunagoil and the western coastline network (2007, 52–53). Similarly difficult to assess and date is a single shard of blue glass, which may or may not be seventh-century in date (Campbell 2007, 61–62).

Both sherds may also have reached the site through 'second-hand' contact with the continent, i.e. through contact with a community which was instead an integral part of the western route network, which may explain the very limited evidence. This may reflect the continuation of the short-distance trading network argued for the Roman Iron Age, a continuation which is also attested by the worked and unworked green stone from Arran found in Trench B (Marshall 1964; Appendix 2), but the evidence does not support

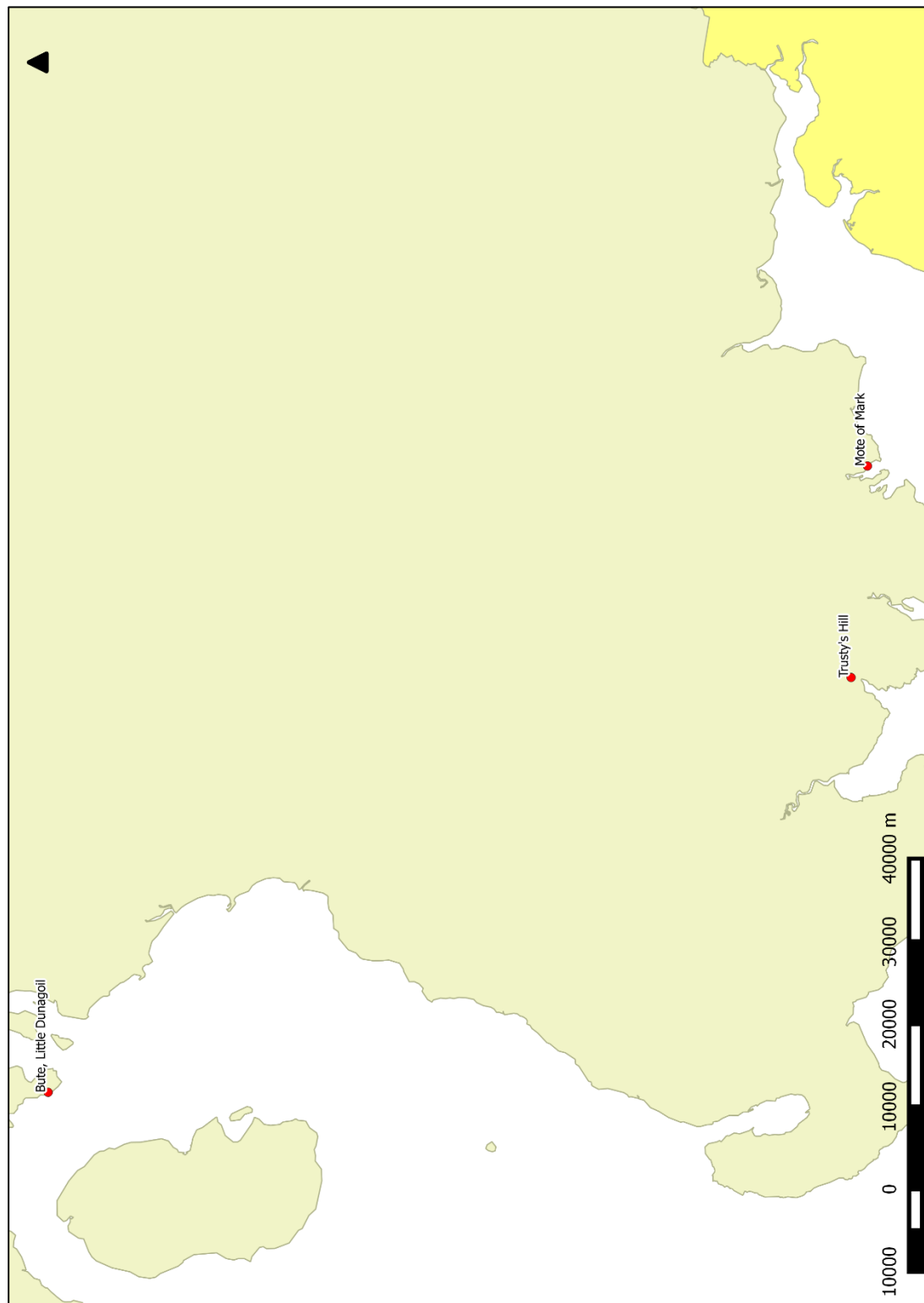


FIGURE 37: EXCAVATED EARLY HISTORIC FORTIFIED SITES (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

economic, and by reflection socio-cultural, thriving. The exclusion from the western coast trading route may be reflective of stagnation or economic regression, a phase which may be connected to the abandonment of Dunagoil. In particular, both the practical visibility advantages of the latter and the possible alternate reading of the creation of this annexe as a statement of power may suggest that its abandonment is equally reflective of diminished concerns over trade with vessels coming in from the south (see figs.29 – 30) and of the erosion of the power base of the local elite.

It is interesting in this regard to consider at least briefly the development of the site at the very end or soon after the study period ends (for the most recent overview of the later archaeological evidence, see Harding 2004a). By the early seventh century, in fact, there is evidence that Little Dunagoil and the island of Bute had become involved with the Dalriada of Argyle, and historical evidence suggests that Little Dunagoil had become a royal centre associated with the Cenél Comgaill, one of the leading dynasties of the Dalriada (Fraser 2005, 111; Fraser 2009, vol. 1 esp. 157, 342). Leaving aside the debate as to the native or immigrant origins of the Dalriada (for a brief overview, see Campbell 2001 *contra* McSparron and Williams 2011), the shift to either a new or an immigrant identity may be considered as additional evidence that the pre-existing elite was experiencing a period of decline in the fifth and sixth centuries.

MOTE OF MARK (64911)

The Mote of Mark is perhaps the single most quoted Early Historic secular fortification in South-West Scotland, because of its extraordinary assemblage. The site was originally excavated by Curle (1914), but much of his interpretation of the evidence and of the chronology he proposed for the site have since been overturned by the most recent re-appraisal conducted by Laing and Longley (2006). According to the latter, the Mote's occupation can be subdivided into three phases:

- i. Phase 1 consists of an open settlement: a single hut on top of a knoll, overlooking the seascape. This phase was considered to be short-lived.
- ii. Phase 2 sees a timber-laced rampart erected around the knoll, which is further defended by one or more lines of walling. Radiocarbon dating consistently suggested a *terminus post quem* in the beginning of the fifth century for the construction of the rampart. The area within the rampart housed two drystone hut circles (fig. 38).

- iii. Phase 3 sees the violent destruction of the site, which was besieged and the defences set ablaze. The inhabitants tried futilely to keep the attackers out using rubble and any objects available to barricade the site: in fact, most of the material culture assemblage for the site has been preserved in this fashion. After the destruction event, the site was briefly occupied by squatters of possible Anglo-Saxon identity. Phase 3 took place in the early seventh century, meaning Phase 2 lasted 200 years at the most.

The material culture assemblage of the site shows beyond doubt that fine metalworking represented the economic linchpin of the site: there were almost 500 moulds and over 100 crucible fragments for penannular brooches, pins, other assorted items of personal decoration, and riding paraphernalia (Laing and Longley 2006, 32ff; see Appendix 2). The items produced at the site were meant to be traded long-distance using the western coastline trading route which linked Britain, Ireland and the continent, and the sheer number of imported Mediterranean and Continental wares in the assemblage (see Appendix 2, Household utensils and furniture) attests to the economic success of the Mote.

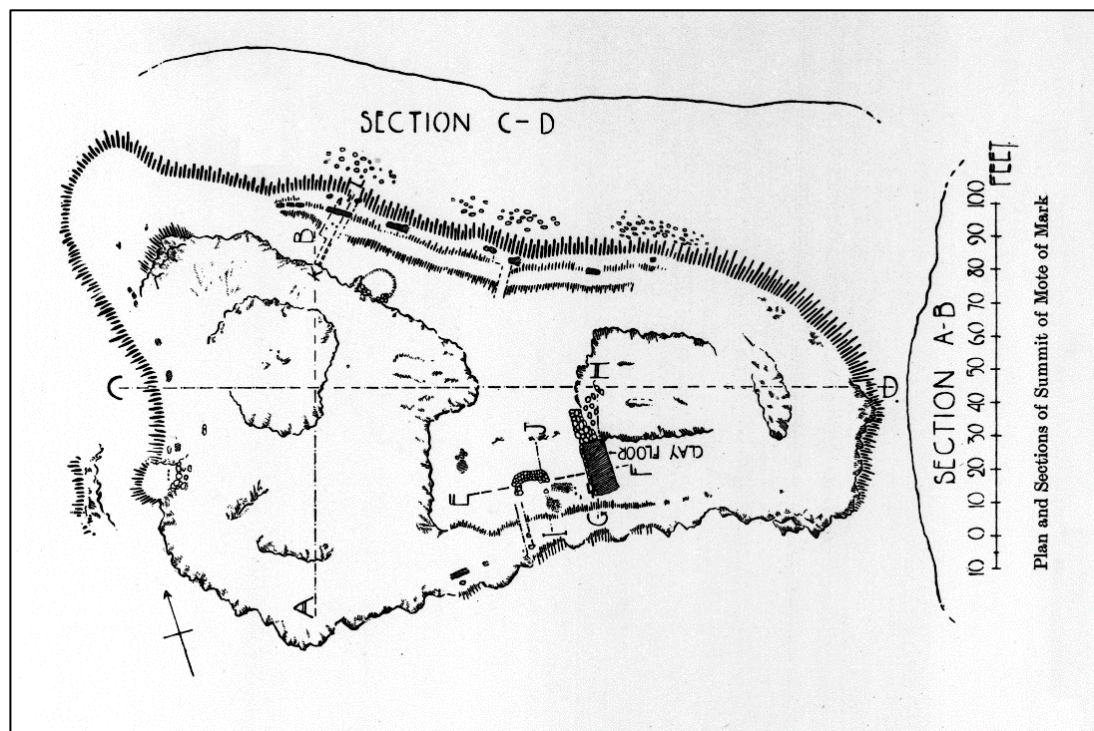


FIGURE 38: PLAN OF THE MOTE OF MARK (©RCAHMS, SC346909)

In chronological order, the wares can be subdivided into three main groups:

- i. Bi-type amphorae: this is by far the most unusual and unique find within the assemblage. Bi-type amphorae are thought to have been produced in the Aegean area and were probably used as containers for wine, oil or other liquid foodstuffs (Laing 2006, 136; Laing and Longley 2006, 104–113). Mediterranean trading routes, according to Campbell's analysis, shut down in the mid-sixth century AD, which gives *a terminus ante quem* for these shards (2007, 125–139).
- ii. Glass Vessels: fragments of two different vessels were found: a possible cone beaker and a bi-chrome vessel with an opaque white decorative band trailed along the rim, a stylistic typology originating from continental Europe which is likely to date from the seventh century (Campbell 2007, 64–67).
- iii. E-wares: these represent the bulk of the assemblage. E-wares are coarse, undecorated vessels ranging in size and shape, from large jars to small beakers, bowls and jugs (Campbell 2007, 32–57). Although they cannot provide refined chronological information, they are thought to be produced in Merovingian France. Like the Bi-type amphorae, they served a utilitarian purpose: probably as trading containers since their production method makes them unsuitable to sustain heat (Campbell 2007, 32–52).

The Mote of Mark, therefore, enjoyed frequent and rich exchanges, with the Mediterranean first and, after the spread of the plague disrupted the original trading network, with continental Europe (Campbell 2007, 132), from its foundation in the fifth century through to its destruction in the seventh. Given that plague is thought to have been spread across Europe by trading vessels, it is possible that its impact at the Mote went beyond economic disruption, but the archaeological evidence available is not suited to explore this question, which will be left for the historical sources in the next chapter

Contact and trade, however, were not limited to the continent. There are several moulds which belie awareness and competence in Anglian fashion and metalworking techniques: the moulds for items decorated with intricate interlace decorative patterns are a particular case in point (Laing 1973a, 33; Laing and Longley 2006, 142–157). The domed jet head pins and the unworked jet also testify to trade link with England, as the jet is likely coming from the Whitby area (Laing and Longley 2006, 102–14; Laing 2006, 131). Unworked

shale from Ayrshire was also found during the excavation (Laing 1973a, 32): it is possible that this material testifies to the production of shale jewellery, which suggests the continuing demand for this kind of adornments well into the Early Historic and may confirm the possibility discussed above that Little Dunagoil was no longer capable of satisfactorily meeting the demand for it. As for contact with Ireland, there is a single pin which is stylistically comparable to a discoidal pin from Lagore, Co. Meath (Laing and Longley 2006, 146): contact with the Continent and Southern Britain trumps contact with Ireland at this site, at least in terms of archaeological visibility.

Laing's excavation of the site has yielded a considerable amount of organic refuse (see Appendix 2): cattle represent the bulk of assemblage, and the analysis of the bones have shown that the animals were local breeds in good general health; some of the bones show bite marks consistent with those of dogs (Laing and Longley 2006, 131–141; Laing 2006, 66–71). The cattle were neither reared nor slaughtered at the site, given the absence of bovine skull bones, though the age of the animals suggests that farming was local rather than imported from farther away (Laing 2006, 66 – 67). From a total bone assemblage of 7537 fragments, only four were from wild animals, and, despite sieving, not a single fish bone was noted (Laing and Longley 2006, 131–141), which suggests that the inhabitants of the site exploited neither wild animals nor the sea for food.

Moving beyond the site itself to its environment, the first thing to be noted is the similarity between the location of Little Dunagoil and the Mote of Mark: the visibility from the Mote is extraordinary, but only towards the seascape. From the site, assuming fair weather, any approaching ship could be seen long before it came close enough to land (fig. 39). In fact, the visibility expands as far as the coastline of Cumbria to the south, as can be seen from fig. 41. The exception to this visibility trend is the approach from the South-East, which is invisible from the Mote (fig. 39). This issue might have been obviated by the construction or re-occupation of the coastline fortifications which dot the landscape of tile NX85 where the Mote is located: both Castlehill Point (64891) and Nethertown of Almorness (64912) are visible from the Mote, as can be observed in fig. 40, and both can observe the stretches of the sea which are invisible from the Mote itself (fig. 42). Neither site has been excavated, but surveys have found evidence at both sites of extensive outworks and defences, including walling (see Gazetteer). From Nethertown of Almorness, it is also possible to see Court Hill (64884), a large univallate fortification

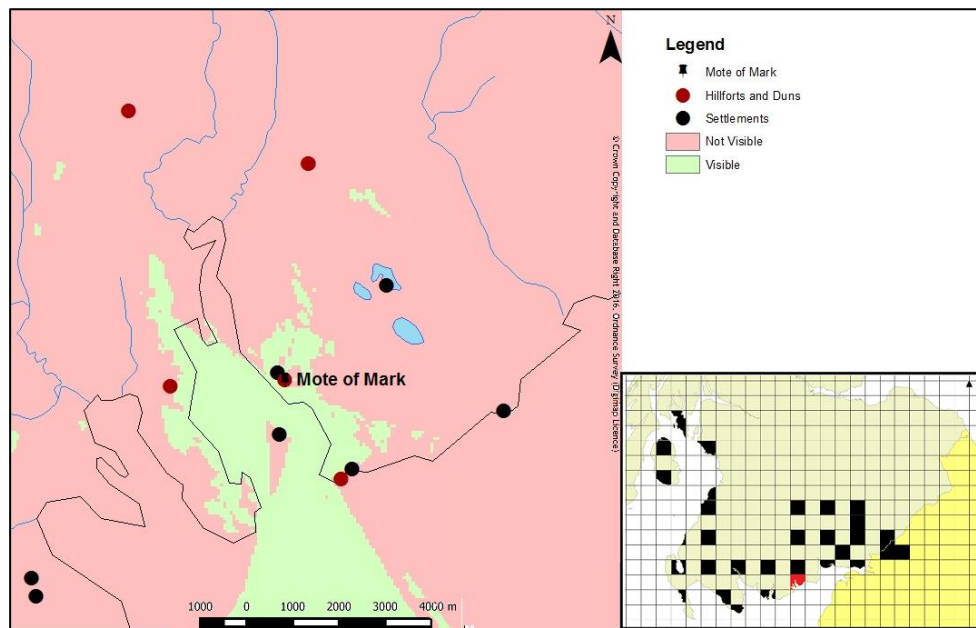


FIGURE 39: VIEWSHED ANALYSIS FOR THE MOTE OF MARK

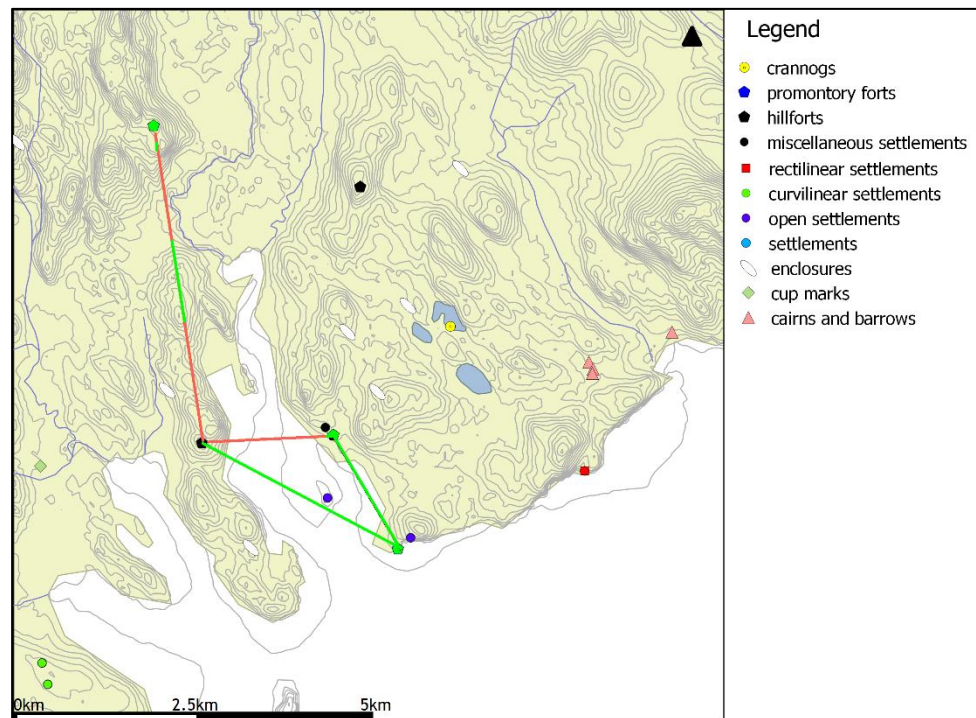


FIGURE 40: INTERVISIBILITY SYSTEM OF FORTS AROUND THE MOTE OF MARK (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))



FIGURE 41: SOUTHERN OUTLOOK FROM THE MOTE; NOTE THE SOLWAY COASTLINE IN THE BACKGROUND ON THE LEFT



FIGURE 42: SOUTHERN OUTLOOK FROM CASTLE HILL

which overlooks the Lower Urr Water, the main river basin of tile NX85 (fig. 73, p. 292) Court Hill, however, does not appear to have been walled: either the coastline hillforts needed stronger defences, either against hostile actions or as a show of strength and power, or the inter-visibility of Court Hill is due to chance. The fourth hillfort in the tile is not visible from any other fortification.

The principal critique of this inter-visibility system is the same already expanded upon in the chapter on Roman Iron Age landscapes (pp. 79 – 80): inter-visibility, in the absence of supporting evidence from excavation, cannot be used to prove beyond doubt synchronic occupation, but only to suggest it. In this case, the similarity in location and defences of the Mote, Nethertown, and Castle Hill is also a point in favour of all these sites having a synchronic phase in the Early Historic period. The over-riding concern for seascape visibility rather than landscape visibility can be interpreted primarily in three different ways:

- i. Subsistence economy was based on the exploitation of maritime resources: this possibility is negated by the bone assemblage analysis, which shows that the consumption of maritime resources was not practised.
- ii. Trade via sea route was of vital importance: this possibility ties in with the material culture assemblage of the Mote and is thus very likely.
- iii. Piracy and other hostile activities were not uncommon, and it was felt necessary to oversee access to the mainland: Phase 3 alone is probably a statement to the uncertainty of this period, although whether the threat had ultimately come from the sea or not is unknown.

Points ii and iii can easily coexist, and point iii in particular ties in with the proposed network of hillforts overlooking each other and the seascape. If this network is accepted, it would imply that the community around the Mote had achieved a significant level of social complexity and was capable of sustaining a full-time craftsmen community at the Mote and the inhabitants of three, or four counting Court Hill, hillforts. In this context, the label ‘princely’ with which the Mote of Mark has been described may be appropriate, though whether ‘princes’ or craftsmen lived at this particular site is a matter of debate, especially when the evidence from Trusty’s Hill is regarded.

TRUSTY'S HILL (63641)

Trusty's Hill is a nucleated settlement approximately 30 kilometres to the west of the Mote of Mark, with significant defensive outworks especially to the north (fig. 43) and, like the Mote, it is located close to a natural landing point on the southern coastline. Its assemblage, as gleaned from the 1961 excavation by Thomas, is unremarkable (see Appendix 2), and the more recent re-excitation by Toolis and Bowles has not unearthed any noteworthy items in this regard (2017).

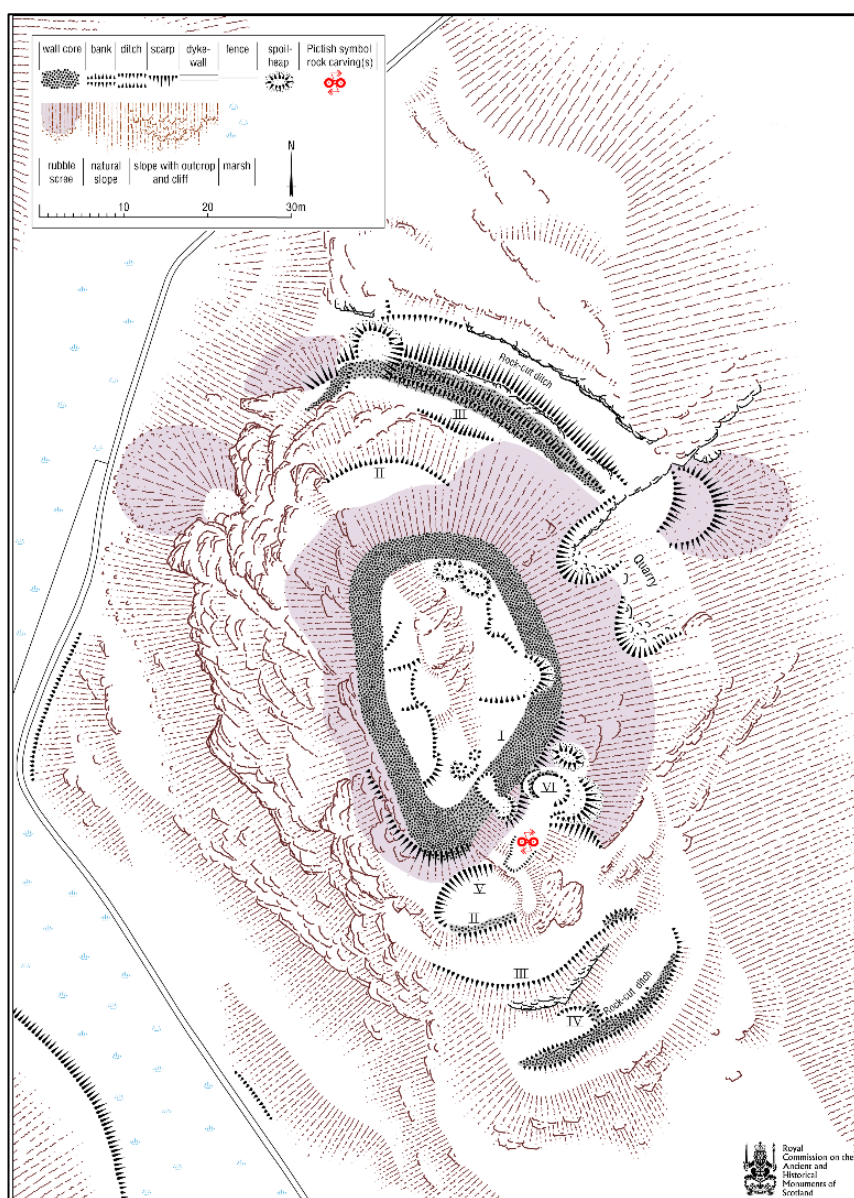


FIGURE 43: PLAN OF TRUSTY'S HILL (©RCAHMS, SC1309006)

Its development is significantly similar to that of the Mote of Mark (Toolis and Bowles 2017, 36 – 37):

- i. Phase 1: the ground at the site was scoured clean, incidentally destroying all evidence of possible prior occupation, and the fortified settlement was built atop the knoll, probably in the early to mid-fifth century. Calibrated radiocarbon dates from the occupation level in Trench 4 sit between AD 411 and 543, though material culture suggests a longer occupation into the second half of the sixth century
- ii. Phase 2: the site was abandoned in the early seventh century at the latest, following the burning and vitrification of the timber-laced rampart.

The importance of this settlement lies in its association with a Pictish symbol stone of class I of sixth or seventh-century date (fig. 44), one of the few known examples outside their main distribution area in North-East Scotland. The stone is located in such a manner as to be visible from the entrance, which has suggested a connection between the two monuments. Thomas (1961, 60) argued that the folklore story associated with the symbol, i.e. that it commemorates the death of a Pictish leader who died storming the fort, is correct, however, this interpretation feels weak. In particular, it seems farfetched that, where the raid successfully repealed, a symbol left to commemorate a raider would be left untouched, unless, of course, the thesis is that the Pictish raid was extraordinarily successful and both settlement and hinterland were conquered and had become a Pictish enclave, which is not supported in either the archaeological or the historical record. Despite this, the idea espoused by Thomas has been widely accepted (e.g. Laing 1975, 33), and Cessford's paper on the necessity to re-assess its meaning has been largely ignored, despite the fact that any of the interpretations he suggested, such as the commemoration of an alliance, a marriage or the appropriation of a symbol from a different culture, are significantly easier to reconcile with the archaeological and historical evidence (1994).

Given the proximity of Trusty's Hill and the Mote of Mark, it may be suggested that the two sites form part of the same community, in which case any of the theories suggested by Cessford to explain the Pictish stone reinforce the plausibility of a highly complex and organised community. This possibility is certainly reinforced by the concomitant and highly similar destruction and abandonment of both sites, though the lack of new material culture data and the absence of new information on the interior features of Trusty's Hill

makes it hard to discern if this was another production centre, like Toolis and Bowles suggest multiple times (2017), or if this was strictly a settlement site, perhaps of ‘princely’ nature.

LANDSCAPE SURVEY

The evidence from Little Dunagoil and the Mote of Mark portray two different realities. The former belongs to a community in decline, with a possible drop in economic capabilities, and isolated from long distance network. The latter belongs to a community risen in social complexity and economic capability, possibly controlling most of the southern coastline of the study area, assuming that the Mote and Trusty’s Hill belong to the same community. Despite these differences, the two settlements share a common trait: control over the seascape.

Access to the sea and its opportunities for contact with other communities cannot be said to be a new concern for the population groups of the study area. In fact, one of the sites

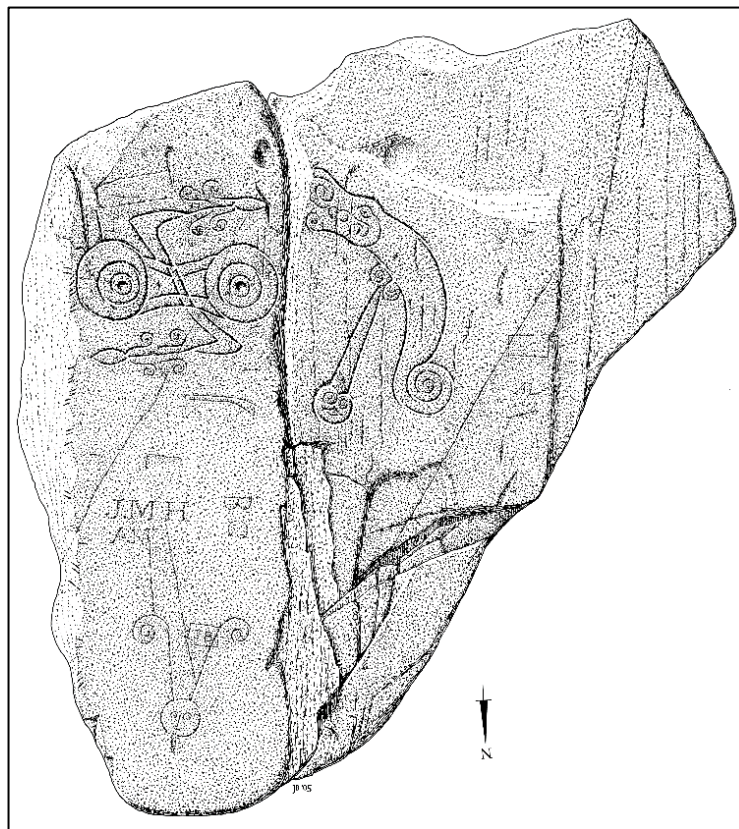


FIGURE 44: PICTISH SYMBOL STONE AT TRUSTY'S HILL (©RCAHMS, SC952087)

discussed in the preceding chapter, Teroy (pp. 98 – 99), is located in such a way that it would have been completely blind to almost all of the surrounding settlements, but a person standing by the broch could have spotted any ship approaching the site from the north and could have seen the hillfort on the opposite side of the gulf, Mid Dinduff, 81571, from which it would, in turn, be possible to monitor the stretch of sea invisible from Teroy itself (fig. 45).

However, access to the long-distance trading network with the continent may be considered as the mark of a successful community in the Early Historic, following the evidence from the Mote of Mark. In fact, the entire economy of the Mote seemingly hinged on this trading network, which allowed direct or indirect contact with regions as far removed as the Eastern Mediterranean. By contrast, the unwillingness or inability of Little Dunagoil to tap into this trading network may be linked to its limited importance in this period, though the causal link between its status and its lack of long-distance trading may be less linear than the available evidence allows to see.

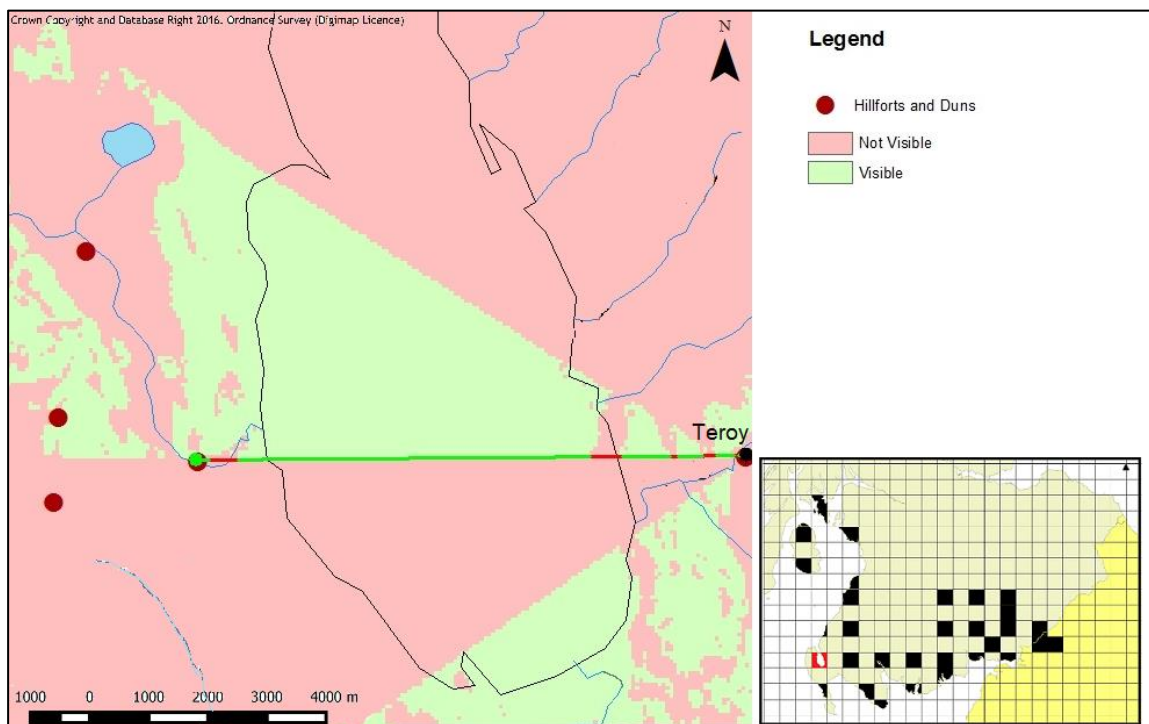


FIGURE 45: VIEWSHED ANALYSIS FROM TEROY, OVERLAID WITH LINE OF SIGHT ANALYSIS FROM THE SAME TO MID DINDUFF

Unfortunately, without excavation and complete assemblages, the impact of this long-distance trading network cannot be integrated into an analysis of the settlement landscape of this period. What can be gauged from the evidence is the relationship of individual hillforts and defended settlements to the seascape, and whether similarities to the set-up known from Little Dunagoil and from the Mote area can be found, in a similar manner as potential Castle O'er type sites were identified in the Roman Iron Age Area 1 settlement landscape (pp. 80 – 83). This spatial analysis was focused on finding either defended settlements with an unimpeded view of the seascape but minimal view of the landscape and which stood in relative isolation, like Little Dunagoil, henceforth referred to as single site systems; or settlements with a similarly good view of the seascape but which formed part of chains of intervisibility, like at the Mote of Mark, henceforth referred to as complex systems. This analysis is to an extent hypothetical as many of the sites within the field of sight may be much earlier or later, and would not have formed a contemporary part of the complex system. However, the lack of any site could be interpreted as a real pattern of absence. In addition, for some of the sites assessed here such as Teroy or Doon Castle, Ardwell, an Early Historic occupation is only assumed by the author, but not proven.

SINGLE SITE SYSTEMS

Using Little Dunagoil as the main example of single-site systems, the main characteristics are:

- i. Lack of other fortifications in the immediate site's environment
- ii. Optimal visibility of the sea
- iii. Poor visibility of the landscape

There are two sites in the sample which share these characteristics: Doon Castle (60487), NX04, and Isle Head (63098), NX43 (see fig. 46 for distribution). Doon Castle is one of the brochs mentioned in the preceding chapter: it is similar in size to Teroy, and it sits within a small enclosure (RCAHMS 1912, 152, no. 433). There are several other promontory forts in its vicinity, but none of them is closer than ca. one kilometre, or is within view of the broch itself. Its position is, in fact, perfect to monitor any movement on the seascape all along the coastline of tile NX04 and beyond, but it is completely blind to the mainland, as fig. 47 exemplifies. Unfortunately, the same dating difficulties apply

to this broch as they did to Teroy, so this site may not belong in the Early Historic period at all (pp. 98 – 99).

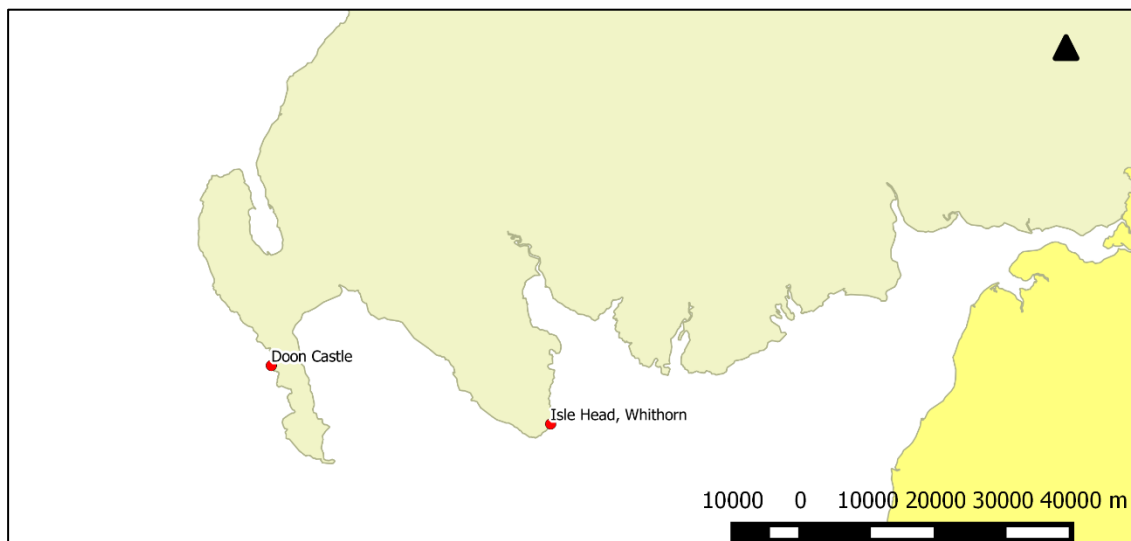


FIGURE 46: LOCATION OF DOON CASTLE AND ISLE HEAD (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

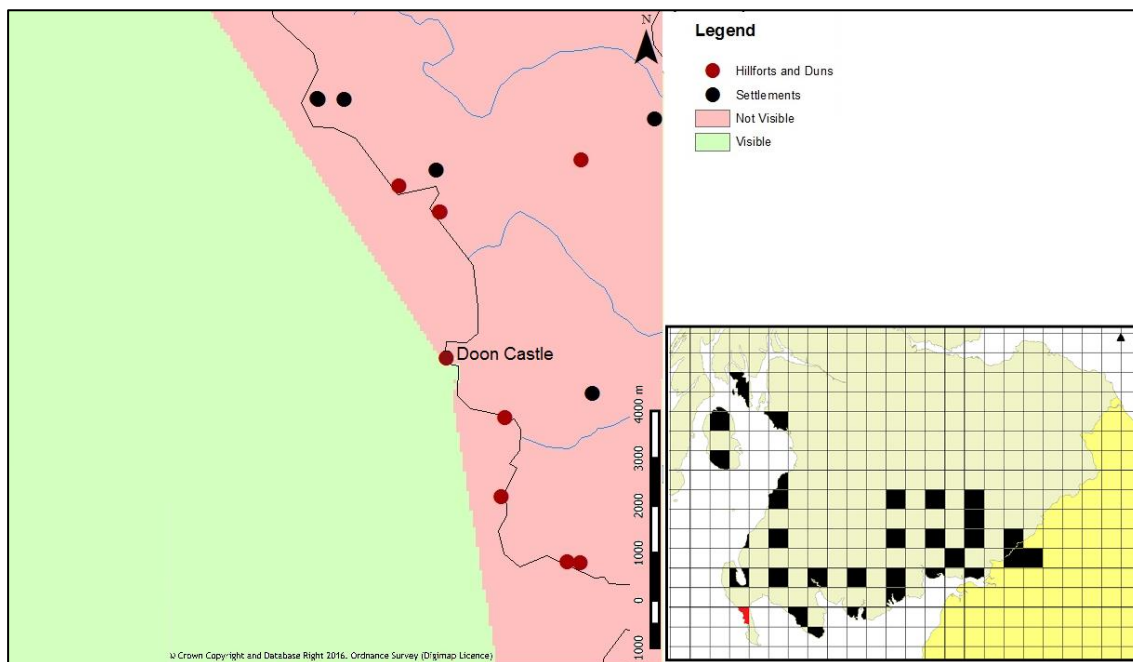


FIGURE 47: VIEWSHED ANALYSIS FROM DOON CASTLE

Isle Head, also referred to as the Isle of Whithorn, has not been included in the preceding discussion because it is an anomalous fort whose period of occupation is unclear

(McCarthy 2008). The fort may or may not have an Iron Age phase of unclear date (Radford 1955, 162), but it is accepted that this fort guarded the access to the road which led to Whithorn, though its visibility range may have changed from its foundation to modern times because of changes in the coastline, and specifically a rise in sea level which joined the former island to the mainland (Hill 1997, 5). As such the fort is still a viable parallel to Little Dunagoil since it was almost certainly occupied by the sixth century, although it may be argued whether it should be classified as secular or religious, since it was part of a monastic settlement. As for its environment, there are several other promontory fortifications along NX43 coastline (see fig. 71, p. 288), which may or may not be contemporary, and may or may not be related to the site, although Isle Head is the only one within view of the natural landing point, and is not, currently, visible from any other fort.

COMPLEX SYSTEMS

Complex systems are represented by the Mote of Mark, whose core characteristics can be summarised as:

- i. Multiple fortifications creating a line-of-sight chain
- ii. Protection of natural landing points and wide visibility of any approaching ships
- iii. Possible landlocked fortification completing the chain

The complex four-fort system around the Mote of Mark is not truly matched in scope anywhere else in the sample, though there are a possible three-fort system in tile NX64 and another possible complex system in tile NS21.

The former system is located in the same tile where Late Roman Iron Age counterfeiting of Roman coinage was taking place (pp. 102 – 105) although the area covered by the three forts, Doon Wood (63892), Drummole Castle (63925), and King William's Battery (63983), is not the same as that of Brighthouse Bay, but rather the much larger bay to the east, where the Lower River Dee and several other minor rivers meet the sea. However, the three forts are far more different from each other than those in the Mote of Mark system: King's William Battery is the smallest fort, and the one whose remains have been almost obliterated by time; the remains of Doon Wood form an irregular, semi-circular shape contained within a ditch and rampart system; and Drummole Castle is a multiphase curvilinear fortification, originally multivallated and later enclosed within a wall (see Gazetteer). Despite the fact that both Drummole Castle and King's William Battery

overlook Doon Wood, their location is also very different: one on a small promontory, and the other landlocked on top of a hill (fig. 48). They are also invisible to each other, so that this complex system may in fact be:

- i. A two sites system where the second fortification was relocated over time. In this case, it is possible that Drummore Castle represents the later fortification. Firstly, it is the most similar fortification to the forts in the Mote of Mark system, thanks to its walled defences: in this case, the second phase of the site would be Early Historic, while the multivallate fortification below may be far older. Secondly, despite its landlocked position, the site offers a far better view over the seascape and over the approach to the inner bay area specifically, while King's William Battery view of the eastern coastline of the bay is poor.
- ii. A complex system which does not rely on an inter-visibility chain, but on a two sites system, which patrols specifically the ingress to the bay area, with a third site which patrols the general access to the coastline. This hypothesis is the one with the most difficulties in explaining the differences in defence and survival between the three sites.
- iii. A false positive. In this case, the inter-visibility is fortuitous, and none of the sites was occupied synchronically, as the differences in location and defences may suggest.

Because of the lack of material culture assemblage or other means of reliable dating, both options i and iii are plausible.

The second possible complex system is even more fragmentary in its evidence than the first. It is comprised of two fairly similar ditched promontory forts, Bower Hill (40933) and Knoweside (128025), and of a smaller site which has baffled surveyors because of its overall small size but significant defensive outworks, Dunduff (40936) (see gazetteer for references to the sites). Bower Hill's visibility is geared towards the seascape, with excellent visibility towards the north and the west, but its location renders it blind to most of the hinterland, including Knoweside, which is just out of reach (fig. 49). Its scope does, however, reach Dunduff, which could then be something akin to a watchtower between the two coastal fortifications. The hole in this theory is the fact that Dunduff's own visibility does not reach Knoweside, but the overall dearth of discovered sites known from the interior of NS21 supports the possibility that there was a second watchtower to

complete the chain and permit a complete and cohesive control over the whole coastline, within and possibly beyond the confines of tile NS21. However, the foundations of this theory are weak and not likely to stand the test of time as and when further data is recovered.

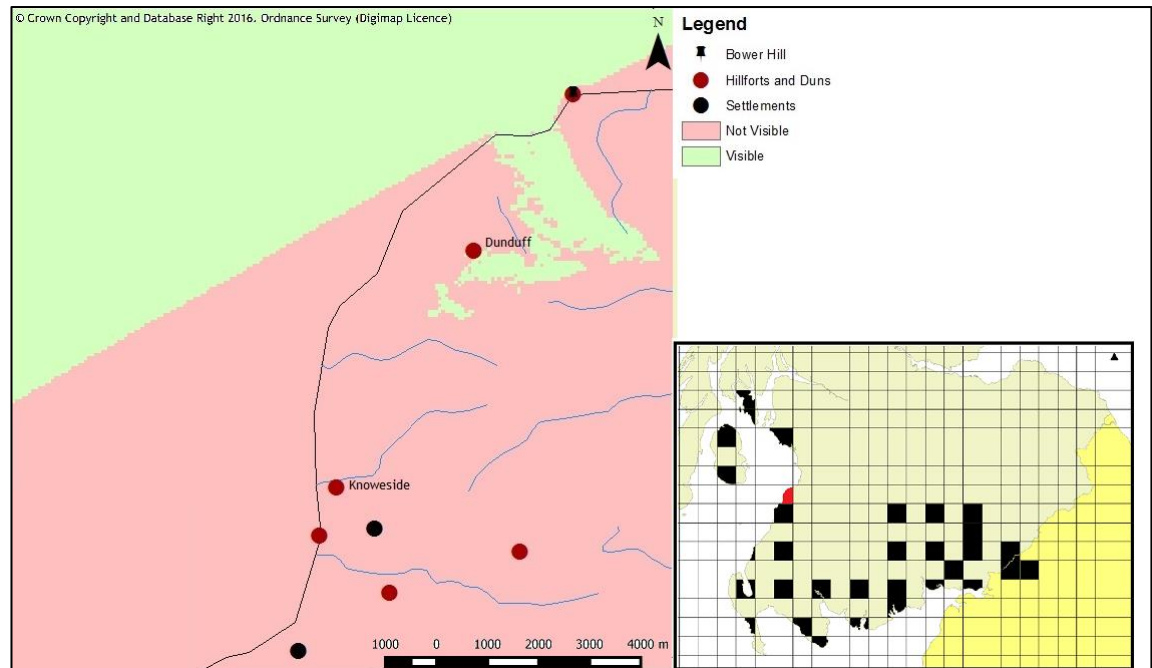


FIGURE 48: VIEWSHED AND LINE OF SIGHT ANALYSIS FROM DOON WOOD

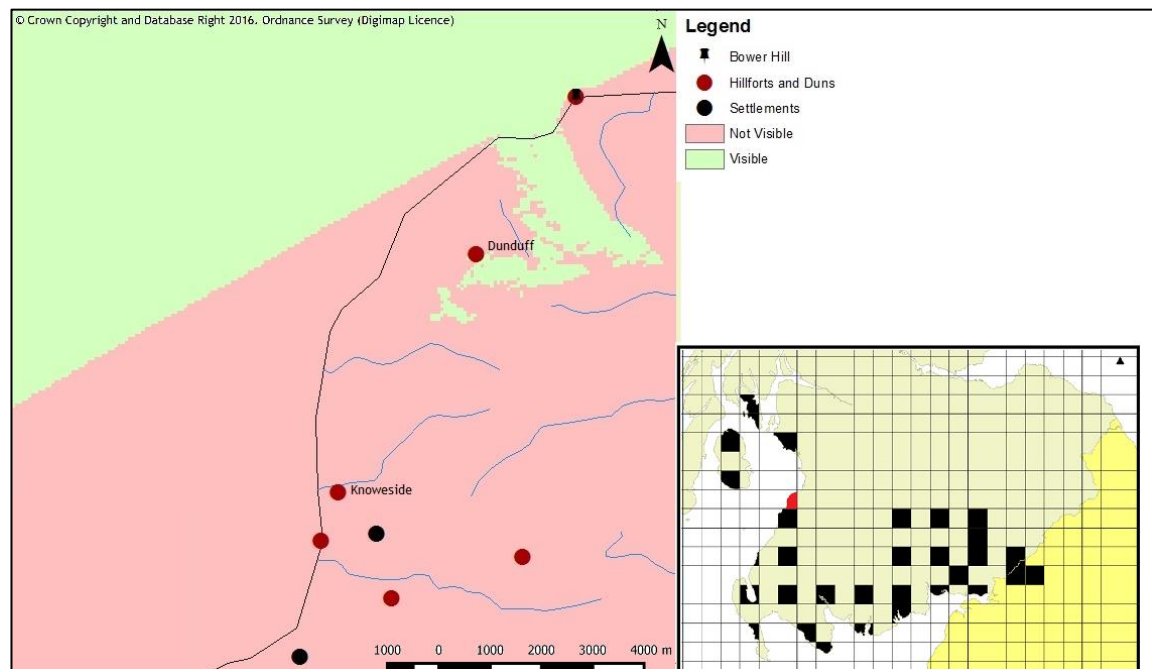


FIGURE 49: VIEWSHED FROM BOWER HILL

DISCUSSION

Before delving into a discussion of the patterns presented above, it ought to be stated once again that these patterns, while plausible, are not backed by enough data to be presented with any certainty. By extension, any theory built on them is similarly plausible but not certain. With this premise in mind, the geographical spread of the single site and complex systems may be particularly meaningful (fig. 50). Single site systems are the only ones to occur throughout the sample study area, on both the western and southern coastline. Complex systems, assuming that the complex of forts in tile NS21 (marked with a question mark in fig. 50) can be considered a complex system, might also occur on both coastlines; but if NS21 was not a complex system but a twin system, then complex systems are actually geographically concentrated in a very specific area along the southern coastline.

A possible interpretation of this settlement landscape is that of fragmentation: i.e. most of the inhabitants of the coastline areas, and probably by extension the hinterland, were organized in small groups, each with their own territory and capable of supporting a numerically limited elite, represented in the settlement landscape by single promontory forts. The possible exception to this pattern is the aforementioned swath of southern coastline around the Mote of Mark area, whose settlement landscape might be indicative of a different, and potentially more complex, society. However, while it might be indicative of a larger and likely richer community, the settlement landscape of the Mote of Mark on its own would not be enough to challenge a reading of widespread fragmentation along the coastlines of South-West Scotland, as the two systems recorded may either be false readings or, if accurate, might be disconnected from each other and thus still indicative of fragmentation. In this context, the relationship between the Mote and 'Trusty's Hill, which has been hinted at during their analysis, becomes crucial.

As has been elaborated above, these two high-status sites are broadly similar, though the excavation of the Mote of Mark covered more surface area than that of 'Trusty's Hill. The chief difference is the presence of a Pictish symbol stone marking 'Trusty's Hill as different. A possible interesting parallel to these two sites is the roughly contemporary Rhynie, which has also been considered a likely royal site in North-East Scotland, and

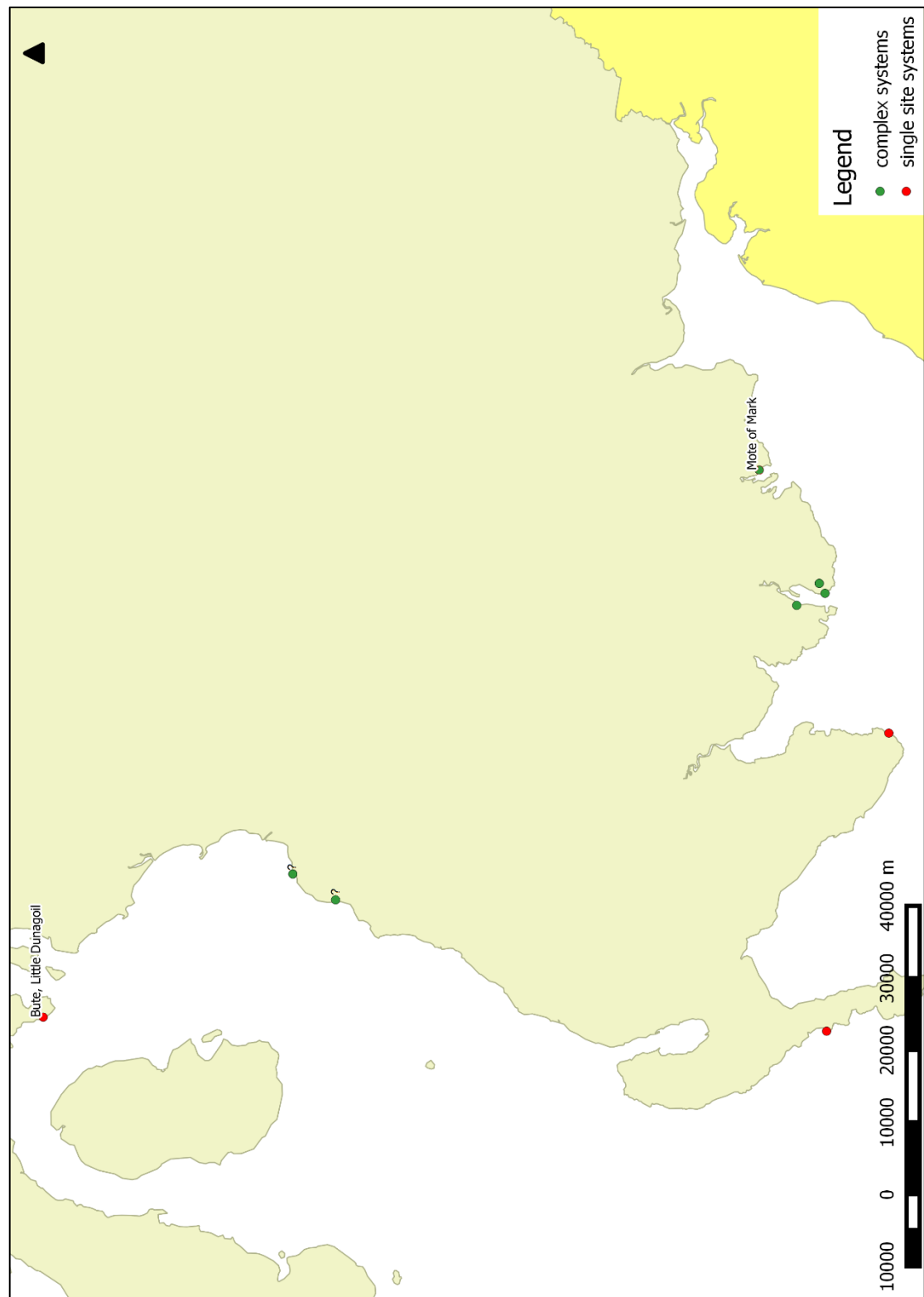


FIGURE 50: SPREAD OF SINGLE AND COMPLEX SYSTEMS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

which is currently been excavated under the direction of Noble (<http://reaparch.blogspot.sk/>). Rhynie, like the Mote and Trusty's Hill, is a heavily defended settlement, though lowland in nature, and is the only other site in Scotland, beyond the Mote and Whithorn, which has yielded late Roman amphora sherds (Gondek and Noble 2017, 60–62). Much like Trusty's Hill, its importance is belied by a number of Pictish inscribed stones, of which one, the Craw Stane, is in a similar location to the inscribed stone of Trusty's Hill (Noble et al. 2013, 1142). Finally, Rhynie is set in a heavily populated area, and it is not the only site of seemingly high status within its community (Gondek and Noble 2017, 63 – 67).

Beyond the possibility of direct or indirect contact between Trusty's Hill and Rhynie – or another Pictish community – suggested by the shared usage of Pictish symbolism, Rhynie shows that similarly high-status sites can be located relatively close to each other and function as part of the same society. On the basis of this parallel, and of the overall similarity noted between the Mote and Trusty's Hill, the latter two sites might be argued to part of a single community, which would then be indicative of a much more complex and more tiered society than that which may be argued based on the evidence of the remainder of the coastline of South-West Scotland. Once more, however, it needs to be stated that this reading is based on limited evidence which could be interpreted differently.

LOOKING FOR A CHRISTIAN LANDSCAPE

FUNERARY EVIDENCE

Christianity, at least in terms of archaeological sites and material culture, does not appear to be widespread in the area under consideration in the pre-Anglian period. Most of the sites which are marked as ‘crosses and monasteries’ in the distribution maps are largely thought to be early Anglian examples, with a smattering of exceptions which will be discussed below. The archaeological evidence for the pre-Anglian period can be subdivided largely into two contexts: funerary and monastic (see fig. 51 for distribution). The funerary evidence is represented primarily by inscribed crosses, for which both the Canmore ID number and the Celtic Inscribed Stones Project number is given. The first can be found at the head of the paragraph, and the second within the discussion. There also are several cists burial sites which may be Early Historic, but the lack of associated funerary goods and of hard dates limits their potential too much to justify their usage in the present discussion. For example, the extent of information available for Longrow (166464), one such possible stone cist cemetery, is that there are a number of protruding slabs and a single complete short cist, constructed setting stone slabs on edge, located in the quarried edge of a sandbank. No other data on the site is offered, nor has it been published to date to the knowledge of the author (<http://canmore.rcahms.gov.uk/en/site/166464/details/longrow/>).

KIRKMADRINE (60441)

The church at Kirkmadrine has preserved several inscribed gravestones, three of which are from the Early Historic period. The first of these stones (KMADR/1/2) bears a four-armed cross with slightly expanded arms, with a loop on the right side creating a chi-rho motif. The stone was also carved with an “A et (O)”: a variant of the alpha and omega pattern which is another marker of Early Historic funerary stones, (Radford and Donaldson 1957, 46). The body of the inscription reads:

“HIC IACENT/S(AN)CTI ET PRAE/CIPUI SACER/DOTES IDES/
VIVENTIUS/ ET MAVORIUS” (Radford and Donaldson 1957, 46)

“Here lie the holy and main priests Ides, Viventius and Mavorius”

It was carved using insular majuscule characters, which are dated from the fifth century onwards (Radford and Donaldson 1957, 47), though the gravestone itself is likely to be sixth-century in date (Radford and Donaldson 1957, 9).

The second gravestone (KMADR/2/1) at Kirkmadrine is very similar to the first one: it too bears a four-armed cross with a chi-rho, and the inscription, which is only partially readable, was written in the same style. It lacks the alpha and omega motif, but it is nonetheless thought to be sixth-century as well (Radford and Donaldson 1957, 9,47; Hill 1997, 619).

The third gravestone (KMADR/3/1) differs from the other two on stylistic grounds. While it too bears the chi-rho symbols, the alpha and omega motif is replaced by its Latinate cousin INITIUM ET FINIS (beginning and end). The characters used on the stone are half-uncial, a slightly later style than the insular majuscule, which reflects continental and Anglian influences: therefore, it is thought that this stone was erected ca. 600 AD (Radford and Donaldson 1957, 9,47; Hill 1997, 618–619).

LIDDESDALE STONE (348100)

The Liddesdale stone (LDDLW/1) is a sandstone gravestone, which reads:

“HIC IACIT / CARANTI FIL(I) / CVPITIANI”

“Here lies Carantus son of Cupitianus” (MacDonald 1935, 34)

The grammar of the inscription sounds wrong with reference to Classical Latin: *iacit* should be *iacet*, and *Caranti*, a genitive form, should be *Carantus*: both are commonly found in Wales and Cornwall, and thus are indicative of influences from the South-West of Britain (MacDonald 1935, 34). The dating of the gravestone is unclear: the RCAHMS is confident in suggesting a date in the fifth or early sixth century for the text, while Thomas argued for a slightly later date in the sixth or seventh century (RCAHMS 1956, 88–9; Thomas 1971, 100). Either interpretation leaves the gravestone within a Brythonic context.

MONASTIC SITES

HODDOM (69504)

The evidence from monastic sites is more plentiful but overall more complicated. More often than not, monasteries in the study area were founded at the very end of the

chronological period under scrutiny, and they are not always therefore directly relevant to the native populations of South-West Scotland. However, the circumstances surrounding the early phases of these sites could be telling of the overall social reality of the native peoples in the seventh century. Therefore, the foundation and early history of the most important monasteries from the study area is going to be summarised and discussed in the present section.

The first of these sites, in alphabetical order, is Hoddum: a monastic site, dedicated to St. Kentigern, whose *floruit* is somewhere between the eighth and tenth century, thus firmly in the Anglo-Saxon period (Lowe 1991, 11–2). Underneath the bank which enclosed this later area, a rescue excavation has found a small, sealed, sub-rectangular stone building with a wooden annexe and protruding walls flanking the entrance, which was further defined by a paved passageway leading south-west (Lowe 1991, 21–23). The masonry of the building makes use of recycled worked stone from local Roman sites: two of the reused slabs also bore second century AD inscriptions (Lowe 1991, 21–22). Radiocarbon dating from a carbonised plank, probably part of the roofing of this building, has yielded a date of 450 ± 50 ad (GU-3130: 525–625 AD) (Lowe 1991, 23): thus well before the Anglian conquest of the region.

Medieval hagiography sees Hoddum as the setting of the meeting between St. Kentigern and Rhydderch ap Tudwal of Strathclyde, and also as the chief church from which St. Kentigern expanded and run a network of churches in Strathclyde and Rheghed, and the saints death is recorded in the *Annales Cambriae* under AD 612 (Lowe 1991, 11). However, hagiography as a genre is well known to reshape the past based on present history and concerns (Fraser 2009, 1:3–6), and the pre-682 AD entries of the *Annales Cambriae* are thought to have been conflated and corrupted to the point that they cannot be trusted (Dumville 2002, xv). From an archaeological perspective, there also seems to be a gap between this fifth century building and the next radiocarbon dated feature, which is an early or mid-seventh century subrectangular building reminiscent of Anglo-Saxon architecture (Lowe 1991, 16 – 17): it is, therefore, quite a stretch, especially considering the dearth of other Christian evidence from the study area, to suggest that the early feature was already tied to the Christian faith.

Assuming the chronology proposed by Lowe (1991) is accurate, then the abandonment of the early building may be worth inquiring further. A possible, if deterministic,

explanation is that the deterioration in climate known for the mid-sixth century (pp. 18 – 20) is to blame for this. It is also possible that other events, such as the plague outbreaks which swept the Mediterranean starting in 541 AD, also had a bearing on the site's history. In this case, the abandonment of the settlement until the creation of the monastic community may be indicative of depopulation and crisis. However, this theory is simplistic, as there may have been a whole host of other reasons unrelated to climate change and depopulation behind the abandonment of a single settlement. Unfortunately, there are no other known settlements of Early Historic date in Hoddum's surrounding area.

INCHMARNOCK (40268) & ST BLANE'S (40292)

The evidence from Bute is similar to that from Hoddum in modern Dumfriesshire: two monasteries were founded in the mid-seventh century, one on the small island of Inchmarnock, to the west of Bute, and the other on Bute itself, dedicated to St Blane's (Lowe 2008; Laing, Laing, and Longley 1998). Both have preserved extensive evidence of economic flourishing, including especially in the production of shale and cannel coal jewellery (Lowe 2008, 183ff especially; Laing, Laing, and Longley 1998, esp 559–560), the very items whose production is seemingly undergoing a crisis in Little Dunagoil (pp. 174 – 176). Much like at Hoddum, an earlier building, radiocarbon dated to the period 400–600 AD, was found under the monastery. Its excavation did not unearth much evidence about this structure, except that the site served as a production centre for metalwork (Lowe 2008, 202–208).

Again, it is not so much the sites themselves to be of interest within the chronological boundaries of this project, but how the evidence for their foundation and their flourishing contrasts the archaeological evidence of a period of stress for older secular sites. An exact superimposition of the dates from these two monasteries and Little Dunagoil cannot be achieved with the current evidence, which leaves two main interpretative options for the relationship between the secular and monastic sites:

- i. The economic crisis at Little Dunagoil is at least partially caused by the foundation of the monasteries, which engaged in similar economic activities and thus stole part of the market previously monopolized by the fort within the local area. Whilst tempting, this reading does not take into account that the Late Roman Iron Age

may also have seen a possible period of socio-economic stress, reflected in the abandonment of Dunagoil.

- ii. Little Dunagoil and its immediate region underwent a period or periods of crisis in the Late Roman Iron Age or the beginning of the Early Historic, whether because of unknown social factors or because of climate-induced difficulties, which left the area economically weaker and underpopulated towards the end of the Early Historic period. The monastic centres took advantage of the available space, literally and figuratively, to insert themselves into the local settlement landscape and carve an economic niche to further support their religious communities.

Both readings are close, though they differ in one key aspect: the first one posits a social and economic stress period in the later Early Historic, while the second one proposes that the stress period coincides with the Late Roman Iron Age or the beginning of the Early Historic period. The latter option is in line with the evidence from Hoddum, which might suggest that most of South-West Scotland suffered a similar period of crisis.

WHITHORN (63098)

Whithorn (Hill 1997) is the most well-known and cited site in the Early Historic period of South-West Scotland together with the Mote of Mark. The site became associated with St Ninian, and by extension with the possibility of early Christianity in Scotland, as it was thought to be the location of his *Candida Casa*. This interpretation may have been partly fuelled by the name of the area in Ptolemy's Map: Λουκοπιβια (Ptolemy 1843, 70, II.3.§7). The first half of the place name is actually likely to indicate a marsh - see for instance Old Irish *líachair*, marsh, rushy place (DIL 2012 L 217.25) -, but it is close enough to the suffix **leuco*, meaning shining or white, - see for instance *caindlech*, shining candle (DIL 2012 C 36.79), and *líachda*, bright (DIL 2012 L 217.66) - that a misunderstanding of the name or a new reading of it may have been applied to the site to support its burgeoning importance (Hill 1997, 27).

Beyond hagiography, Whithorn is indeed a monastic site, founded possibly as early as the fifth century by an immigrant community, which flourished and expanded over time (Hill 1997, esp. 67-133). Whilst the site will be briefly discussed below for its value as an indicator of the development of the pre-existing native society of its hinterland, it will not be pursued further in its own right despite its early foundation date. This decision is based

on the focus of this research project, which is the development of the native groups of the region across the Roman and immediately post-Roman periods. Since the evidence for this monastery points to its foundation by an immigrant group, it was felt by the author that it represents a break from native society, in much the same way that the shift towards an Anglo-Saxon leadership and culture across the study area in the seventh century does.

Across the site and its environ there are several crosses and gravestones, two of which are of particular Early Historic relevance: the Latinus Stone (WHIT1/1/1) and the Petrus Stone (WHIT2/1/1). The Latinus Stone, a gravestone, is the earliest dateable Christian monument in Scotland: it is a roughly oblong slab, unworked in its lower third and with some damage to the top-left (Hill 1997, 614). The inscription commemorating the dead has been executed in incised Latin Capitals, and reads:

“TE[DOMI]NV[.]/ LAVDAM[V.]/ LATINV[S]/ ANN[OR]V[.]/
XXXVET]/ FILIA SUA/ANNI V/[I]CS[I]NVM/ [FI]CERV[.]/ N[I]PVS/
BA[R]ROV[A]/DI (Hill 1997, 615)

‘Praise to the Lord. Latinus, 35 years old, and his daughter, five years old.
[His] nephew Barrovadi erected this sign’. (author’s translation)

A very worn chi-rho armed cross, which has been identified as being of Constantinian form – i.e. with six arms –, is located on top of the inscription: this type of chi-rho symbol is an earlier form than the four-armed crosses found, for instance, at Kirkmadrine (pp. 195 – 196), and is highly atypical of Northern Britain and, so far, unique (Hill 1997, 615). In fact, some have suggested that this may not be a chi-rho at all, but a random pattern reminiscent of a chi-rho and caused by weathering (Forsyth 2007, 23). Less unusual but still in keeping with continental fashion is the inscription itself, with the surviving nephew recording the erection of the monument, and a reference to the 146th psalm in the opening (Radford and Donaldson 1957, 9,38). The stone was found in a secondary context, and it has been suggested by Whithorn’s excavator that it originally stood in the area of the sixth century burial ground (Hill 1997, 616), though earlier scholars proposed an erection date as early as 450 AD (Radford and Donaldson 1957, 9).

The Petrus, or Peter, Stone was almost certainly located close to the road which linked Whithorn to the Isle of Whithorn, to mark a *locus*, i.e. a small oratory. Its original location,

however, cannot be ascertained with precision, since it was removed sometime in the early nineteenth century to a secondary context (Hill 1997, 37, 616). The body of the stone was recycled: there is evidence of dressing and possibly even of an inscription, both erased and replaced by a dedication to Saint Peter accompanied by a cross (Hill 1997, 38, 616). The cross is stylistically comparable to seventh-century examples from Ireland, the Isle of Man, and Northumbria (Hill 1997, 38, 616). A link to the Anglo-Saxon world is confirmed as well by the long forked uprights which characterise the letters of the inscription, and which are also a good dating indicator, as they are typical of Merovingian Gaul in the 7th century but go out of fashion during the 8th century (Radford and Donaldson 1957, 9, 39).

The material culture recovered during the excavation comprises the largest assemblage of Early Historic imported wares in Scotland. The sheer amount of these allowed Campbell to conduct an in-depth analysis of chronological changes in the availability of different wares and in the routes and origins of the traders who supplied South-West Scotland. He surmised that there were two separate trade routes: an earlier, Mediterranean one which flourished during the fifth and sixth centuries, and a later Gaulish-centred market which took hold after a brief pause, probably at the same time that the locally produced class E vessels were produced at the site (Hill 1997, 35–7, 297–326).

The inhabitants of the site favoured objects from three distinct cultural areas. The first one, despite the uncommonly early foundation of the site, is the Anglo-Saxon world, material from which is present almost from the beginning, and only grows over time (Hill 1997, 301–303). The second is Ireland, which only becomes a steady influence from the seventh century (Hill 1997, 103–109). A third exotic component to the material culture assemblage is represented by the sherds of Samian, coarse, and glass wares which were found at the site (Hill 1997, 293–296). There are two differing views on these objects:

- i. The first, championed by the specialists who analysed the Roman assemblage, is that these items represent a genuine Roman Iron Age phase at the site, based on the typology of Samian wares present and their limited wear (Hill 1997, 26, 292 – 294). However, no evidence was found of buildings pre-dating the first phase of the monastery.
- ii. The second, favoured by Hill, proposes that these objects were deposited in the post-Roman period, perhaps during the construction and early stages of the site,

in line with the absence of underlying settlements beneath the monastery and its early history (Hill 1997, 38–39).

Both views have their merits and their limitations: the first opinion is informed on the contributors' experience of material culture assemblages and Roman and Early Historic imports in Scotland, while Hill is drawing his conclusion based on the wider context of the Roman part of the assemblage.

The main issue with Hill's interpretation is that Roman ware, a mostly first and second century AD commodity in Northern Britain, is traditionally thought not to be deposited in contexts so late as this. There is, however, increasing evidence from the Portable Antiquities Scheme and other English sites that these items remained in circulation well after the Scottish Roman Iron Age ended, with examples of reused sherds and vessels, both ceramic and glass, redeposited into the fourth century and beyond, so their presence alone is no guarantee of a Roman Iron Age date (Swift 2012).

The seven Samian fragments do not show "undue traces of wear" (Hill 1997, 293), but two of them were found in close association with the sixth-century imported E-ware, and another two were found as talismans in graves of late seventh-century date (Hill 1997, 73 – 74), thus in a far later context and recycled as talismans in one of the ways noted by Swift (2012). Of the five coarse ware fragments, two came from a layer of waterborne silts deposited in an Early Historic layer; one was securely linked to its sixth century context, and a fourth belongs to an amphora (Hill, 1997, 294), a type of objects which may have survived in use as trading container without significant changes to its exterior far beyond its production date. As for the glass fragments, Price, the glass specialist for the site, argued that it reached the site as scrap in the Early Historic based on their context and poor conditions, and they are thus not indicative of a Roman Iron Age date (Hill 1997, 294 – 295).

This leaves a total of four sherds which may have reached the area during the Roman Iron Age, a proposition which is not impossible, especially if the road under the monastery is taken in consideration (Hill 1997, 25). In this case, though, the sherds may simply belong to unfortunate breakages of items on their way to a Roman military site or to a native settlement, such as Dowalton Loch crannogs, as an exchange or diplomatic gift items, rather than to a settlement. The number of pieces in this assemblage which may be argued to belong in the Early Historic phases, though, also suggests that these sherds too reflect

recycling of Roman items in the sixth and seventh century. Therefore, it feels unlikely to the author that there was a Roman Iron Age settlement or phase at the site, and thus Hill's reading of the evidence has been favoured in the analysis. Consequent to this interpretation, Whithorn's assemblage of Roman wares was also excluded from Appendix 2.

One of the aspects that Hill discusses in the excavation account is the cultural character of Early Historic *monasteria*. In particular, he points out that such early communities tended to prefer isolated areas with limited existing populations (Hill 1997, 28): however, Whithorn was built in an area which was far from underpopulated in the Roman Iron Age. Whithorn's micro-landscape, in fact, roughly coincides with the western tiles of Area 2, where Rispain Camp and Dowalton Loch were located (pp. 114–118). Rispain Camp does not survive into the Late Roman Iron Age, but there is mid-seventh century, potentially Anglo-Saxon, material culture in Dowalton Loch (Hunter 1994), suggesting that either the lake retained its significance through the Early Historic, or that its significance was restored after a break, which would explain the seeming lack of Early Historic but not Anglo-Saxon items. However, unless Whithorn is exceptional in its location, then the evidence from this site aligns with the evidence with Hoddum and Inchmarnock: the Late Roman Iron Age and Early Historic may have been periods of crisis for the native populations of South-West Scotland.

DISCUSSION

The evidence from early Christian sites is, admittedly, as geographically skewed as the coastal analysis described above for the secular fortifications: the sites are few and far between, and they do not cover a significant proportion of the study area, as is particularly clear from fig. 51. Despite this, there is a potential common thread linking all of the *monasteria* presented above: depopulation. The areas in which all are located were significantly populated and economically successful in the Early Roman Iron Age, which implies significant changes in either the Late Roman Iron Age or the Early Historic period. Climate and related concerns, such as famines and epidemics, may offer one avenue of research, which will be explored further in the section on the written evidence, but it is likely that other social factors were involved in this change.

The evidence from the funerary sites is even less clear than that for the monasteries, though they all share a seemingly southern location. Kirkmadrine sits west of Whithorn,

and its evidence can be probably considered as an extension of the evidence of the latter, given their proximity to each other and the fact that all of the early stones in the graveyard are in secondary contexts. The other two sites are located in the south-eastern reaches of the study area, relatively close to Hoddum (fig. 51). As for the Liddesdale Stone, the linguistic and stylistic character of the gravestone point to a fifth to seventh-century date, but the stone lacks any kind of Christian symbol, be it a chi-rho or an *A et O*, which casts some doubts over its intrinsic Christianity. The Latin literacy level it portrays, though, suggests a significant level of contact with Southern Britain, as there is no known parallel in the Roman Iron Age north of Hadrian's Wall. However, it is impossible in the absence of other contextual evidence to explore the nature of this relationship and the possible links between this gravestone and Hoddum.

SUMMARY

This chapter began with a reference to the difficulty of seeing this period in the archaeological record of the South-West, due to a lack of widespread excavation and the longevity of architectural forms. In fact, the analysis of what evidence is available from both archaeological and historical sources points to another factor for the limited incidence of sites of this period: widespread crisis.

The evidence from the archaeological remains is overwhelming in this regard:

- i. Analysis of coastline fortifications of possible or plausible Early Historic date suggests an elevated degree of fragmentation in small groups, even in areas where previously complex polities had been theorized based on evidence from the Late and Roman Iron Ages (pp. 141 – 144). The only exception is the Mote of Mark, which, incidentally, is the site with the clearest evidence of violent destruction.
- ii. Monastic centres are founded at the very end of or after the study period, and they are invariably located in either good agricultural land or in areas with excellent trading links. As such, many of these sites have a pre-monastic phase. The evidence from Hoddum is the best dated one, and it shows a distinct occupation break between the two settlements. Whithorn is a similar case, as it represents the foundation of an immigrant monastic community in a settlement landscape which was definitely populated in the Late and Roman Iron Ages.
- iii. The evidence for the desertion of settlements in good agricultural locations and the drop in trading potential and interaction is present in the secular fortifications

as well: imported goods are limited in numbers and dispersal, and even where present there is a distinct difference between secular and monastic sites quantities. The Early Historic phase of Little Dunagoil has also preserved more modest evidence of craftsmanship than the Late and Roman Iron Ages phase.

The joint evidence of Points ii and iii supports an argument of depopulation as well as of crisis, which will be explored further in the evidence from the written sources in the next chapter.

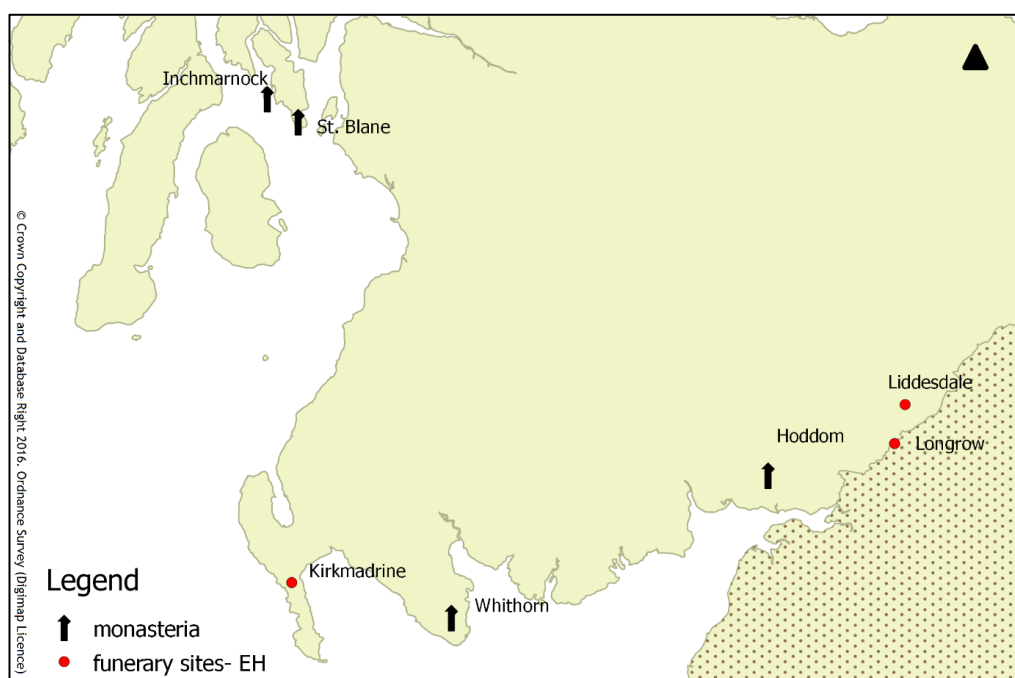


FIGURE 51: DISTRIBUTION OF MONASTERIA AND FUNERARY SITES

9. THE EARLY HISTORIC IN THE WRITTEN SOURCES

From a historical perspective, the list of reliable witnesses which can be queried about the settlement evidence of Northern Britain is limited to two works: the *Annals of Iona* (McCarthy 2008; Charles-Edwards 2006) and Gildas' *De Excidio et Conquestu Britanniae* (2006). The archaeological analysis has shown a possibly complex and cohesive community on the southern coastline of the sampled study area, set in a settlement landscape otherwise consistent with a period of crisis and potential depopulation. The sources were, therefore, interrogated on the following questions:

- i. Who lived in the South-West?
- ii. Is there evidence of negative climate change and related issues, such as famines and epidemics?
- iii. Is there evidence of social instability?

WHO LIVED IN THE SOUTH-WEST?

The key source for the first question is the Annals, given their overall interest in Northern British politics. However, despite repeated mentions of the Dál Riada and even of the Picts, there is almost nothing about the study area, or about the Brythonic-speaking populations of Northern Britain in general. The island of Bute, which one might expect to feature more heavily in the text because of its location and long history, is not mentioned once within the thesis' timeframe. The earliest entry for Britain occurs in 473, when an unnamed British abbot died (Charles-Edwards 2006, 74), but Britons only truly enter the secular scene in 631, when "Cadwallon, king of the Britons" defeated an Anglian leader with the aid of Penda, another Anglo-Saxon ruler (Charles-Edwards 2006, 137).

The analysis of the Annals of Iona is, then, a study of absence: the real question is not so much who is mentioned, but why geographical areas close to the monastery are ignored almost entirely. The simplest answer is that information about this area was not considered of value to the patrons and allies of the monastery at Iona, and therefore not recorded. The chronological difference between the first mention of an abbot and of a king in Britain might offer a possible interpretation as to the gap: Brythonic groups were not as socially complex, and therefore not as economically and militarily strong, as other groups. Alternatively, interest in Northern Britain did not begin until after the Deiran conquest of the region, thus entries about the study area are later and buried under

Anglian references. Both explanations fit different facets of the evidence, and both may be viable depending on the time-frame and area considered.

CLIMATE CHANGE, FAMINES AND EPIDEMICS

Moving onto the second question, one scenario which would explain a significant depopulation in the study area during the Early Historic is the one hinted at in the discussion of Hoddom: climate change and its consequences. In the entries of the *Annals of Iona*, this scenario would leave traces as records of bouts of particularly bad weather, and records of famines and plagues. The first entries are almost as rare as those mentioning South-West Scottish sites. In fact, within the timeframe of the study period, there are only two weather-related entries: one at 564.2 and one at 589.3 (Charles-Edwards 2006, 105, 116). The first one mentions an unusual gale, and the second an unusually hot and dry summer: neither event is likely to have been the cause of protracted agricultural damage. However, the evidence from these entries cannot be taken as an indication of generally good weather conditions: since the entries related to meteorological events all specifically mention unusual conditions, it is entirely possible that gales were, in fact, common and that by extension most summers were wet and cold. The written sources, though, may not be the best witnesses about a protracted climate shift towards colder and wetter weather that span decades, as all but the worst seasons may have escaped the view of those who were living it. Tree-ring analysis, ice core readings and other scientific techniques employed by climate change specialists agree for a cooling trend across the entire northern hemisphere (pp. 16 – 17): it cannot be suggested that the study area did not also suffer its consequences.

In this context, the second group of entries, those regarding famines and plagues, are more valuable, and this group is indeed spread throughout the entire sixth century:

“536.4 Failure of bread

539.1 Failure of bread

545.1 The first plague which is called *Bléfed* [...]

549.4 A great plague

554.2 A pestilence which is called *Samthros*

576.3 A spark of leprosy [...]” (Charles-Edwards 2006, 94,95,97,99,101,110)

Overall, these entries amount to two famines closely spaced together in the first half of the sixth century, and as many as four different epidemics which swept Britain and Ireland across the second half of the same century. It is possible that the two entries at 536 and 539 are in fact duplications of each other (Charles-Edwards 2006, 94), though this need not be the case. Looking at Gildas’ text, it emerges that famines, at least in a Southern British context, were a common occurrence throughout the fifth century, so much so that their first mention occurs in §2, where the tone of the whole work is presented to the readers (Gildas 2006, 8–11). The scale of the famines is better presented in §20 and §25, where the local populations are said to effectively sell themselves up into slavery to the raiding forces of Picts and Scots in the hope of being fed (Gildas 2006, 46-49, 56-61). Assuming that this is not poetic license on the author’s part, it implies a protracted food shortage which must have claimed lives, especially among the young, old and sick members of the local communities, and caused mobility from affected areas to other regions. However, there is no direct evidence that famines were also affecting the study area, so it is not possible to know the extent to which food-shortages affected South-West Scotland, whose subsistence economy was, seemingly, based on farming.

Looking at the disease outbreaks listed, the health prospects of the Early Historic communities do not improve. The first outbreak is defined by the entry as *bléfed*, which is the name commonly used in Old Irish for the Bubonic Plague (MacArthur 1949, 172). Bubonic plague is usually associated with hot weather, rather than cold snaps or famines (MacArthur 1949, 175), but colder weather is conducive to epidemics of pneumonic plague, a variant of the disease which becomes transmissible person-to-person and is thus explosive in its spread in ways that traditional bubonic plague, diffused by a vector combination of fleas and rats, cannot imitate (Sallares 2007, 240). Mortality patterns recorded during the seventh-century waves of plague in England are in fact consistent with pneumonic plague, which means that the latter is at least plausible (Maddicott 2007, 185). Anglo-Saxon sources do not stretch back as far as the sixth century, but there is an entry in the *Annales Cambriae* which suggests that a *mortalitas magna* was also affecting Wales in 547 AD (Dumville 2002, 1; Maddicott 2007, 174). Given that plague was almost certainly spread across the Mediterranean and beyond through trading, especially of cloth and grain (Hays 2007, 49; Maddicott 2007, 191; Xu et al. 2014, 5), this suggests that the

trading route up the western coast of Britain and the eastern one of Ireland was the entry route of this disease, which makes it likely that it also reached the study area, with an entry point at the very least in the Mote of Mark region.

The mortality rate of the disease is not readily apparent by the entry in the Annals of Iona, which record a single death (Charles-Edwards 2006, 97), but other descriptions from recurring outbreaks of *bléfed* exist. An infected monk at Kilkenny offers a very bleak perspective on his community's chances of survival, when he left blank pages in his book should "by chance any man survive, and any one of the race of Adam escape this pestilence, and continue the work that I have begun" (in MacArthur 1949, 173). This seeming exaggeration is actually in tune with the description of the pandemic from across the Mediterranean world. John of Ephesus describes the ripe fields left unharvested because all of the men 'from Syria up to Thrace' are dead or dying (Lives of the Eastern Saints, §17.1, in Little 2007, 7). Procopius echoes the sentiment when he relates how the epidemic nearly annihilated the human race in Persia (§2.22 – 23 in Little 2007, 8 – 9), and Paul the Deacon recounts how northern Italy becomes devoid of life and its crops too are left in the fields (*Historia Langobardorum*, §2.4, in Little 2007, 12). *De Excidio Britanniae* does not refer specifically to plague, but it too describes a disease outbreak of proportions similar to that of the Mediterranean accounts just summarised:

"Pestifera [...] quae in brevi tantam eius multitudinem [...] sternit, quantam ne possint vivi humare" (§22, Gildas 2006, 52).

'A pestilence [...] which in a short time killed so many that the living could not bury [them all]'. (author's translation, loose)

Modern scholars tend to downplay the mortality rate of plague down to 25% and assume that all of the accounts are simply exaggerating (Sarris 2002, 173), but *Y. pestis*, the bacteria which has recently been proven the culprit of the outbreak (Harbeck et al. 2013), is a relatively new disease for which the sixth century outbreak would have been the first pandemic and the first possible contact with populations across Europe (Sallares 2007, 252): there would have been no possible immunity to temper the number of deaths. In this respect, mortality rates of 75% or even higher, suggested by comparisons with better-documented outbreaks (MacArthur 1949, 175; Sallares 2007, 243; Xu et al. 2014, 2), and a rate which seems consistent with most written sources, may not be entirely far-fetched.

The nature of the *Annals'* 549 AD epidemic is unclear, but the entry cited remembers six important people, secular and churchmen alike, who died of it (Charles-Edwards 2006, 99). While the elites were certainly as mortal as the rest of the populations, they did usually have greater access to resources: this indicates that a high death rate in the elite is likely to reflect a similarly high or higher death rate across the general population. MacArthur hypothesised that this plague could be relapsing fever based on the Old Irish name for the disease (1949, 174). Relapsing fever is common during famines, and it is usually deadly when, as it often is the case, is associated with dysentery (MacArthur 1949, 171, 181). However, Dooley has argued on linguistic grounds that this plague, referred to in the sources as 'yellow plague', is actually the same as *bléfed*, which she reconstructs as *blá*, yellow, coupled with *féth*, ill appearance, so that this would actually be the second recurrence of the first wave of bubonic or pneumonic plague, a pattern common from the Mediterranean (2007, 217–218).

The next outbreak is called in the *Annals Samthbrosc*, which MacArthur argues is smallpox (1949, 183–184). Smallpox is actually a collection of viruses, which cause diseases of varying gravity: *variola minor* has a fatality of 1%, but *variola major*, which is the most common virus, kills 30% of infected; other *variola* viruses can be fatal in almost all cases (<http://www.bt.cdc.gov/agent/smallpox/overview/disease-facts.asp>). The last outbreak in the sixth century is called leprosy, but the term is unlikely to relate to the modern illness contemporary medicine labels thus. In fact, true leprosy has a very slow contagion rate and it is usually a contributory factor to death rather than the cause of it (MacArthur 1949, 183; <http://www.who.int/lep/mortality/en/>). Early Historic writings tend to treat the name leprosy as a description of symptoms, which means that a whole host of diseases with higher contagion and fatalities percentages may have been involved (MacArthur 1949, 183–188; Crawford 2007, 66). Woods, however, has argued that the entry at 576 is actually a badly corrupted recording of an original which read '*magna pestis glandularia*', i.e. bubonic plague (2003), which would bring the count of recurrence of plague in the sixth century to three main episodes.

SOCIAL STABILITY

Moving onto the third question, the main witness for the social stability of communities in the Early Historic is Gildas, who attacks in his work five leaders of such groups: Constantine, Conanus, Vortipore, Cuneglasse and Maglocune (§28–35, Gildas 2006, 68–

83). 'Their 'crimes' are remarkably consistent, and can ultimately be summarised as belligerence and unethical behaviour.

Belligerence, and its categorization as sin, is a particularly interesting place to start. In modern western culture, and by reflection within the confines of the English language, belligerence, and by extension the idea of wanting to start a war, is always a negative trait. However, Gildas, following a tradition initiated by St. Augustine (Lenihan 1996; Ingiyimbere 2014), seems to think that there are good wars and bad wars. In §27, he writes:

"Belligerantes, sed civilian et iniusta bella agentes" (Gildas 2006, 66)

'They strive for war, but civil and unjust ones'. (author's translation, loose)

This sentence is part of the introduction to the middle section, where Gildas analyses the moral decline of secular society in his times. Throughout this paragraph, Gildas alternates between a positive introduction and a negative connotation: for instance, this stylistic choice is most obvious where he states:

"Britannia [...] iudices habet, sed impios" (§27, Gildas 2006, 66)

'Britain has judges, but they are false'. (author's translation)

Within this framework, Gildas, therefore, clarifies that war in and of itself is not necessarily evil. In the preceding historical section, one can, in fact, find an example of a good leader who does engage in warfare:

"Innumeris onerantes aethera votis usque delebantur, duce Ambrosio Aureliano [...] vires capessunt, victores provocantes ad proelium" (§25, Gildas 2006, 60)

'After having burdened heaven with countless prayers not to be destroyed, the men rally under the leadership of Ambrosius Aurelianus, forcing the winners to battle.' (author's translation, loose)

In this retelling, Aurelianus' fighting is sanctified by God through prayer, approved by the Brythonic communities he leads, and can also be construed as defensive, given that the victors referred to in the text are the Anglo-Saxon groups which have invaded and forcefully displaced the native inhabitants of the island. This parallel allows a better

understanding of the dichotomy of war in Gildas' mind, and informs the reader's understanding of what "civil and unjust" wars are.

In fact, although both adjectives are instinctively understood and paired usage may be nothing more than a stylistic choice, in the succeeding paragraphs one can find a slight tension between conflicts between one's own people, and conflicts against the Church. The two cannot always be separated, but it is possible that that the stress on civil *and* unjust reflects conflicts in the laic and secular word. This possibility may also be reinforced by the usage of the noun *tyrannos* (§27, Gildas 2006, 66) to describe the leaders of Britain, a word which had become associated with the persecution of Christians from the fourth century (Barnes 1996). However, while there is some evidence which suggests Christianity may have reached the study area in the period under analysis, as seen in the previous sections, this evidence is limited and somewhat controversial. Therefore, let us focus here on examples of belligerence in the secular world.

In §33, Gildas asks of Maglocune:

"Nonne in primis adolescentiae tuae annis avunculum regem [...] acerrime ense hasta igni oppressisti?" (Gildas 2006, 76, 78)

'Is it not true that, when you were young, you overthrew the king your uncle with sword and spear, without mercy?' (author's translation)

This passage refers to a coup d'état, where Maglocune took over power from a family member forcefully. The passage does not state whether this was the paternal or maternal uncle, nor how long he had been king for before Maglocune successfully deposed and disposed of him, but it is certainly a potential indicator of social unrest and, given the seemingly smooth transition between the two, also an indicator that the rules of succession which characterize later kingdoms were yet to take a thorough hold in late fifth century society.

The situation described by this passage is echoed in the textual narrative of other broadly contemporary Early Historic societies. According to Old Irish law, for instance, murder is usually atoned either through vengeance or, as the law prefers, through the payment of a fine based on the 'honour-price', i.e. the social status of the deceased, but where murder is committed within a family, the crime becomes all the worst (Kelly 1988, 125–127). The

law allows for the place the slaying occurred to be destroyed without consequences, while the murderer, no matter his or her status, loses honour-price entirely and is set adrift in the ocean with minimal supplies, to be judged by God (Kelly 1988, 127, 220). However, the reality of practice is different, and there are recorded examples of kings achieving power in much the same way as Maglocune (Kelly 1988, 127–128). Along the same lines, Anglo-Saxon poetry suggests that kin-slaying was a shameful act, but not necessarily unforgivable in neither religious nor secular contexts: in *Beowulf* the hero successfully quiets an opponent with the accusation that he killed his own brother, but said opponent was and remained in the king's hall (Wyatt 1925, 32, v.587).

Another example of 'civil and unjust' belligerence is offered in §30, where Gildas attacks Conanus writing:

“Nonne pacem patriae [...] odiens civiliaque bella et crebras iniuste praedas sitiens animae tuae caelestis portas pacis ac refrigerii praecludis?” (Gildas 2006, 70)

Is it not true that you lock your soul outside the doors of heavenly peace and solace, since you hate a peaceful homeland and thirst for civil war and constant unlawful sacking? (author's translation, loose)

This sentence, as is often the case, does not refer to specific episodes, so it is impossible to guess at which events caused Gildas to accuse Conanus of conspiring against peace amongst his own people. The second accusation, however, hints at sacking and raiding: while it is possible that raiding occurred within his own people, perhaps against detractors and opponents, thus explaining the reference to civil war, it is also possible and plausible that the raids took place against other groups. Conflicts involving named British leaders are only recorded in the *Annals* after the seventh century, but what little praise poetry is extant from the Early Historic (e.g. Jarman 1990; Taliesin 1968) reiterates in almost every poem that a truly great leader is capable of pulling off successful raids against his neighbours while being able to prevent his own lands from being ravaged. The poem *To Cynan Gornwyn*, for instance, makes both points in short succession: Cynan is both the “harasser of Cornwall” and the “upholder of [his] vast kingdom” (Pennar 1988, 43–46). Assuming that this practice is what Gildas is attempting to make a stand against, then both he and praise poets are confirming, from opposite perspectives, the existence of diffused conflict between the different groups which inhabited the island.

Unfortunately, endemic social instability in Southern Britain cannot prove beyond doubt social instability in South-West Scotland, but some of the factors which fed widespread social instability and change throughout Europe and beyond, such as climate change and high mortality rates, are common to the two regions (Gunn 2000; Büntgen et al. 2016; Haldon 2016, 248) so it is not unfeasible to suggest that relations between communities and within the elite of each group may have been strained in the study area as well.

DISCUSSION

The lack of interest of the *Annals of Iona* in the South-West as an equally complex group of units as that of Ireland or other Northern British groups is at the same time an easy fit with and in opposition to the archaeological evidence. Let us look closely at both options:

- i. *Annals and Archaeology*: the evidence from Bute is the key witness in favour of this reading. As has been noted above (pp. 174 – 176), the material culture assemblage for the Early Historic phase of Little Dunagoil suggests that this period is not as rich and economically developed as the previous and successive ones. The fort is reduced in size at the end of the Early Roman Iron Age, economic production of shale rings seems to have been drastically scaled down, and the evidence for Mediterranean and Continental trade is minimal. The evidence from the western coastline, with their preponderance on single site systems for monitoring land-access, is also a possible indicator of small sub-regional groups, rather than larger geographical units with significant manpower at their disposal.
- ii. *Annals v. Archaeology*: the evidence from the Mote of Mark casts the most doubt in this regard. The site, as described above (pp. 176 – 179), is an extraordinary centre of high-status metalwork items, set within a farming landscape which was successful in cattle, pigs, and sheep/goat farming. The site has extensive links to the Mediterranean and Continental areas through trade and is set within a network of fortifications which permit monitoring of not just the immediate access to the natural landing point, but also the approach to the bay from any direction, as well as possible monitoring of developments in the hinterland. A possible similar set up was noted close to the west of this network, though if the two systems are part of a single large unit or not is beyond the scope of possibilities presented by the landscape sample. If a single unit was capable of supporting full-time craftsmen,

the efforts required to gather the necessary metals and clay for the production of the objects the craftsmen made, and the men –and probably their families as well – who occupied the forts to monitor seascape and landscape, then it stands to reason that such a unit deserves consideration.

The resolution of this dichotomy might lie in what is considered British at a particular point in time. Irish groups are known to have settled parts of Wales from the mid-fifth century (Jankulak and Wooding 2007), and the debate over the Irish identity of the Dál Riata is currently on-going (p. 33), although the bottom line, at least where written sources are concerned, is that Dál Riata is not synonymous with British: it is a separate entity with its own kings. While there is no archaeological ground to suggest an Irish presence at the Mote of the Mark, there is plenty of evidence for an Anglian presence in Southern Scotland by the early seventh century: Edinburgh, in South-East Scotland, may have become an Anglian settlement as early as 638 (Charles-Edwards 2006, 141), and the squatters at the Mote of Mark's Phase 3 either were Anglo-Saxons or had access to Anglo-Saxon material culture (Laing and Longley 2006). Considering that the Annals of Iona truly begin gathering information on Scotland in the mid-sixth century (McCarthy 2008, 8; Charles-Edwards 2006, 8), this does not leave much scope for a British South-West, but plenty for an Anglian one.

Alternatively, an answer to this apparent dichotomy is offered by the social instability portrayed by Gildas. Societies as deeply divided and riddled by internal disputes and endemic violence may not have yielded enough influence to be noticed in a wider context. The same argument can be proposed for the evidence of famines and plagues. While there is no corroborating archaeological evidence that the study area also suffered from food shortages, the evidence for the spread of plague across the British Isles suggests that this was indeed an issue for the study area as well. There is no archaeological evidence for its impact in South-West Scotland either, but even plague epidemic leave little archaeological evidence with which to chart their spread (Sarris 2002; Kennedy 2007). In terms of negative evidence, the foundation of Whithorn, Inchmarnock, St. Blane's and Hoddum may suggest that there was indeed a population void which could be filled by monastic communities throughout the study area, while the persistence of the Mote of Mark may be explained by the concentration of the survivors at the pre-outbreak key centres (e.g. Maddicot 2007, 211).

A critique to the significant impact of the plague pandemic in the sixth century could be made on the grounds that this was not the first pandemic to hit the Roman world, but that it was in fact preceded by the so-called ‘Antonine plague’ which swept the Mediterranean between 165 AD and the 180s AD, and even claimed the life of Marcus Aurelius. In particular, it could be argued that it is not possible to argue for the significant impact of the latter epidemic but not for the former. However, the two episodes are actually significantly different in nature. The Antonine plague was not, in fact, a plague at all but almost certainly smallpox (Haas 2006; Lo Cascio 2012). As such, the mortality rate between the two pandemics was also significantly different: most scholars argue for a mortality rate below 15% (Duncan-Jones 1996; Scheidel 2002), with several analyses suggesting that the rate may well have been in the 10% and below of total population (Bruun 2012; Elliot 2016). A mortality rate of 10% is, of course, significant, and it would almost certainly leave deep psychological scarring and cause some amount of social instability, but not on the same scale of a pandemic which may have killed up to 75% of the population. The difference in magnitude between the second-century smallpox pandemic and the sixth-century plague pandemic is simply too great to imply that they should have had similar outcomes on the same population groups.

Other contrary arguments to significant depopulation could be made on the ground that bubonic plague is primarily a disease which impacts urban centres, as it requires a concentration of both people and rats to spread. As seen above (pp. 208 – 211), however, it is possible that the pneumonic variant of the plague is the culprit of the outbreak in the British Isles. Better documented outbreaks in later centuries have also amply demonstrated the capacity of this disease to affect with undiminished capacity even regions characterised by single, dispersed households through inter-personal contact at funerary rites and through fleeing individuals trying to escape contagion (Karlsson 1996; Maddicott 2007, 193–194). Since there may have been as many as three major episodes of plague in the sixth century alone, a major fall in population numbers is plausible, especially when the famines hitting the survivors because of missed harvests, thus augmenting mortality, and the complications in subsequent population growth posed by the demographics of mortality are taken into account (Hays 2007, 39).

Significant depopulation across Southern Britain at least is in fact suggested by non-religious texts. For instance, the Anglo-Saxon poem *The Ruin* features a deserted

landscape, with the author wandering through the remains of an abandoned city and imagining its life up until “days of pestilence came” (Gordon 1942, 92). While the metaphorical meaning of the poem is up for debate (e.g. Beaston 2011), the landscape which provides the backdrop of the poem was supposed to be a sight the intended recipients of the work would recall through personal experience. It can, therefore, be argued that the historical evidence supports a picture of social instability, in-fighting and high mortality due to famines and plagues.

10. SOCIETY IN THE EARLY HISTORIC PERIOD

The working definition of social reality has already been presented in chapter 7, where society in the Late and Roman Iron Ages was discussed. As such, it will simply be reminded here that social reality is broadly composed of three aspects: social organization, cultural norms and identity. In much the same way as it was for the preceding period, it is not possible at this time to discuss the cultural norms for these early centuries, so the focus in this chapter is going to be on social organization and identity.

ON KINGDOMS

Before we continue with the discussion, a word of caution should be spent on the usage of the term ‘kingdom’, which has as many problems as the already discussed term ‘tribe’ (pp. 162 – 163). The Early Historic period, at least in popular culture, sees the emergence of kingdoms across Europe. This perception is accurate in determinate contexts, such as continental Europe, where over the fifth, sixth, seventh and eighth centuries the Germanic-speaking groups which overran the Empire formed into kingdoms. Though the individual characteristics of each are different, there are a number of shared traits which occur in all of these early kingdoms: a functioning legal system, a system of dynastic succession, and the means to produce enough wealth, either through trade or agriculture or both, to sustain the military and political power of each succeeding king over a defined territory (for a recent overview, see Goetz, Jarnut, and Pohl 2003, or Pedrazzini 2007 and Halsall 2013, 270-281 for a case study). Most kingdoms also include a capital city in which the ruling dynasty is settled and from which administrative tasks are initiated, but this was not always the case in the early historic period, or even later: these systems are usually referred to as itinerant or travelling kingdoms, and the kings routinely travels across his territory and resides in different locations throughout the year (Bernhardt 1999, 45–84; Fernando 2013).

Beyond continental Europe, however, problems begin to emerge: even in Southern Britain, it is difficult to talk about kingdoms before the emergence of Anglian polities such as Mercia or Northumbria. Some of the discrepancies between the reality of southern Britain at the very least and the image of an organised kingdom have in fact already been highlighted in the Early Historic chapters (esp. pp. 215 – 218), where the discussion hinged on the stability of native societies, or more appropriately, the absence of it. Indeed,

Woolf has recently suggested that leadership in what used to be the civilian zone of the British province remained acephalous and based on the Roman tenurial system, and that it was this inherent weakness that allowed the province to be swept up by the Anglo-Saxons as quickly as they did (Woolf 2003, 365–367). In contrast, the previous military zones, either by choice or by necessity, adopted over time a distinct system of wealth redistribution which built the basis of the Welsh Mediaeval kingdoms and of the better-organised groups based on Hadrian's Wall (Woolf 2003, 376–379; Collins 2012).

The usage of the word kingdom is therefore based not on archaeological or social evidence, but on written sources, and mainly on Gildas's *De Excidio Britanniae* (2006), and on its abundant use of the word '*rex*' and of its derivatives. The most common translation of the word, even in classical Latin, is 'king', but it has already been remarked above that in a political sense, a *rex* is a leader backed by military strength, religious norms and a judicial system of sorts. The word itself, in different contexts, could also be used to indicate a generic leader, a teacher, or simply a powerful or rich individual (Castiglioni and Mariotti 1996, 1120).

As a rule, it is true that most authors in this period conceive '*reges*' in the sense of kings, but most authors are writing from mainland Europe and the Mediterranean, where leadership, as seen, was significantly stronger than what the archaeological evidence is suggesting for Britain as a whole. It is debatable whether or not the leaders of fragmented post-Roman northern Britain would be identified as kings beyond the simple fact that the word had come to indicate leadership in the period.

As for the *Chronicle of Ireland*, there is no mention of a Brythonic king at all before the year 613, where the third entry reports the death of a "Solon son of Conan, king of the Britons" at *Caer Legion*, modern Chester (Charles-Edwards 2006, v.2 p.128). In opposition, original entries in the *Chronicles* mentions several kings of the Irish, of the *Dál Riatai* and of the *Cruithni* – or Picts – since the middle of the sixth century at the latest (Charles-Edwards 2006, v.2, p.100 ff).

Therefore, the author argues that, just as we cannot necessarily trust a classical source to say *gentes* in the same way we would characterize the hazy concept of 'tribe', so we cannot blindly translate *reges* into 'kings' for any and all Early Historic social groups, without additional information and caveats. The assumption that a term equals another

completely, without considering the different nuances which colour every word in the original language and in the translated language, does no favours when attempting to understand past societies. This concept is perhaps even more important when one remembers that most people, even scholars, will never approach the text in its original language, let alone parsing the text semantically, rendering the translation the only point of contact available. In this respect, it may be noted that all translations by the author have avoided the word ‘king’ and its derivatives wherever possible, favouring the less semantically loaded translation of ‘leader’. As for the word “kingdom”, it will only be used here with reference to continental and non-Brythonic groups, whose societies were, or were in the process of becoming, kingdom-states.

ON SOCIAL ORGANISATION IN SOUTH-WEST SCOTLAND

It may be helpful to begin once more with a review of the archaeological evidence, with particular attention to settlement hierarchy, economic specialization, and imported material culture. Unlike the Roman Iron Age, the Early Historic settlement landscape was tentatively divided into two general areas, rather than three. The first encompasses the western coastline and the islands, or Bute at the very least, given Arran’s overall dearth of evidence. The second is centred on the Mote of Mark and the neighbouring tiles: that is, approximately what were the eastern tiles of Area 3. The evidence for both areas is strictly limited to the coastline: be it an actual pattern or, more likely, an excavation bias, the coastline is the only area with any clear, or arguably possible, Early Historic sites.

On the western coastline, the single most important excavated site of this period in the area remains Little Dunagoil. As noted already, the Dunagoil annexe is abandoned in the late Roman Iron Age, while the crafting economy of the site, centred on shale armlet and rings, collapses to a shade of the former output. Production continues on a smaller scale, while the site is still either involved in mixed farming or supplied by the neighbouring communities, with no detectable differences in dietary preferences as expressed by the bone refuse (pp. 121 – 122).

Beyond Little Dunagoil, a number of possible Early Historic fortifications dot the western mainland coastline, either on their own or as part of a system, controlling the coastline and access to the more favourable landing sites. Very few of these sites have been excavated at all, let alone to modern standards, so the pattern is tentative at best. Assuming

that it may be considered valid, the evidence points to a degree of fragmentation and the presence of several small groups each controlling limited areas, as there is no clear linkage between different single systems, with a single possible complex polity along the northern mainland reaches of this zone (pp. 192 – 194).

In contrast to the situation of Bute and Little Dunagoil, the southern coastline sees the foundation of a new coastal hillfort in the early fifth century: the Mote of Mark, which very quickly becomes a booming metalwork production centre, with an unparalleled number of moulds for brooches, pins and varied items of personal adornment throughout the study area and beyond. Because of this, the site has often been labelled as ‘princely’, but the evidence for a ‘princely’ lifestyle of the inhabitants is limited. While it is true that modern perception of a non-working elite may not be viable for this period and culture, it is also true that the main description of a leader in contemporary praise poetry is that of a warrior, able to both raid and defend effectively, and a giver of gifts, rather than that of a smith (Taliesin 1968).

On the other hand, this is the one site with significant evidence of continental and Mediterranean imports in the study area, but as this is also the only excavated and fully published such site, it is possible that evidence of dispersal from the trading centre itself is missing. Of course, it is entirely possible that the praise poetry is either an incomplete portrayal or that the elite of this area had different cultural norms than those Taliesin’s poetry was aimed at. In this case, the crafting centre and the main residence of the richest members of the group, and thus the smiths and the leaders, coincided. Either scenario can be argued for or against in the absence of excavation of the sites which may comprise the Mote’s hinterland.

The Mote, in fact, has been noted as being part of a potential tetrarchy of coastline forts (pp. 179 – 182), which could have easily monitored incoming and outgoing sea-traffic at different access points within the delta of the Lower Urr. Unlike the single sites summarised above, this group is significantly larger and as such covers a much higher portion of the local coastline and possibly of the hinterland as well. In other words, it is a more complex system, probably indicative of a more complex polity capable of supporting a web of fortifications rather than merely one or two such sites, which is certainly in keeping with the success of the Mote as a production and trading centre. A similar system was noted at the long fjord-like delta of the River Dee and other two

secondary rivers, in tile NX64, which is the next sample tile to the east of the Mote of Mark. None of the sites was excavated, so this is only a surface similarity. Nonetheless, it is tantalizing that the only other possible complex system is so close to the Mote of Mark. It is plausible that the two systems are in fact part of a single multi-tile system, but the evidence for that is non-existent without excavation.

Mention should also be given to Trusty's Hill, a hillfort located to the west of the Mote of Mark, famous because of its association with a Pictish symbol stone which is visible from its entrance (pp. 184 – 185). The hillfort, which may be considered a nucleated settlement, had significant defences, specifically geared to the north, but since the site was not within the boundaries of the sample area its relationship with other coastal fortifications, and with the system theorized for the Mote, has not been explored. It may, however, be significant that, like the Mote, the site's end was violent, and symbolically marked through an act of vitrification from the inside of the inner wall at roughly the same time that the Mote of Mark was destroyed.

Beyond the coastline area, mention should be given to the only dated Early Historic site in what was previously Area 1: the small fifth-century building beneath the Anglo-Saxon *monasterium* at Hoddum (pp. 196 – 198). Of particular note is the presence of reused inscribed Roman masonry, though this may have simply been a matter of convenience, since at least one of the two inscriptions was built in face-uppermost (Lowe 1991, 21). Its relevance in the region is unclear because of the lack of contextual information. There are, in fact, no dated settlements, either open or enclosed, and very little in terms of material culture from the area to allow for a separate discussion. It might be possible that the site was in some way linked to the Mote system, but there is no clear evidence in this regard to bolster this theory.

The two areas are quite dissimilar from a settlement perspective, with a more complex southern area, possibly united, and a less complex and subdivided western coastline. Economic specialization can only be evinced in the latter area, which is also the only area with evidence of traded goods. It also bears remembering once more that most of the evidence comes from the coastline area, with the interior devoid of known, or more likely recognised as, Early Historic sites. For ease of reference, the main characteristics of the two areas are summarised in table 21.

The first step in trying to ascertain whether the multiple or single leadership societies of the Roman Iron Ages became complex enough to be called kingdoms on social grounds, rather than the hazy ground of distant written sources, is to remind ourselves of what the general characteristics of early kingdoms are. As noted already, they are:

- i. A defined territory, with recognisable, defended borders
- ii. A large settled area
- iii. A capital centre
- iv. Developed economy
- v. A military or warrior class
- vi. A system of dynastic succession
- vii. A functioning legal system

The last two points, and to some extent point v, require the presence of contemporary written sources to be discussed meaningfully, something which is lacking for the study area. As for the first four points, one would be hard-pressed to argue for the presence of a kingdom or kingdoms along the western coastline on the basis of the archaeological evidence. Indeed, once the evidence for climatic cooling, already discussed at pp. 16 – 18, and the concerns about the failing population health analysed in the previous chapter (pp. 208 – 211) are taken into account, the situation is perhaps even more removed from a period of social growth.

	Settlement Hierarchy	Economic Specialization	Dispersal of Imported Goods
Western coastline	n/a; obvious defended settlement sites but no dated 'lower' settlements to go with them. Defended sites seem to occur either alone or in binary systems	Limited evidence; where available, most sites still seem to rely on mixed farming with crafting activities on the side. Evidence of decline of previous crafting centres (e.g. Little Dunagoil)	Little to no evidence of imported goods other than coins
Mote of Mark area	n/a; obvious defended settlement sites but no dated 'lower' settlements to go with them. Defended sites seem to occur within a more complex web of three or four inter-visible fortifications.	Higher than along the western coastline. Mote of Mark site shows high specialization as a metalwork production and likely trading centre; other sites, where evidence exists	Mote of Mark is the only site in the study area and period with any evidence of imported EH goods. As such, dispersal is limited to point of contact.

TABLE 19: SUMMARY OF THE ARCHAEOLOGICAL EVIDENCE FOR SOCIAL ORGANIZATION IN THE EARLY HISTORIC PERIOD

THE MOTE OF MARK AS A KINGDOM IN THE MAKING?

However, there is a possible candidate for an early kingdom within the sampled study area: the Mote of Mark on the southern coastline. This site, unlike the main settlements elsewhere, is not just an Early Historic foundation, but it is also an evidently thriving one, at least until the Anglian take-over and its obliteration as both a production centre and a settlement. However, it is worth questioning whether or not the social organisation of this area can be paralleled to that of a kingdom, especially given the lack of radiocarbon dates or clearly dateable excavated material outside of the Mote of Mark.

The hypothesis espoused in the preceding chapter is that the inter-visibility and similarity among at least three of the four fortifications around the Mote, and indeed the similar system in the next sample grid to the east, are indicative of a single system. By assumption, given the location of these sites, there were other settlements, enclosed or otherwise, which were dedicated to agriculture or mixed farming. The core difference from the preceding period is one of scale: the settlement pattern is no longer a one-hillfort plus homesteads system, but it is a system of hillforts, possibly with their own standing and function, embedded in a mixed farming landscape. Of course, the lack of evidence leaves this hypothesis in the realm of possibility only, but were it accurate, then it is possible to suggest that the Mote was embedded in a defined, defended and settled territory. Assuming that Trusty's Hill was part of the same system because of its location, it is possible that this territory did not extend deep into the mainland of the region, given the emphasis on northern defences noted by Thomas during his trial excavation in 1960 (1961, 67).

This brings the discussion onto the topic of a capital centre. Assuming that only the Mote itself was a production and trading centre, one might argue for the Mote as the capital of this area. This argument would require the assumption of a primarily crafting/trading elite class, as opposed to the presence of a warrior elite class, which is what most sources across Europe suggest for the ruling class. While the craftsmen would probably have needed sponsorship and protection from an elite or ruler, and while this elite may have resided nearby, the settlement evidence for the Mote is rather limited, even more so when compared with other attested capital centres such as Dunadd in Argyll (Lane and Campbell 2001). When compared with Dunadd, and indeed with other possible kingly centres such as Tara in Ireland or the capitals of the Latino-Barbaric kingdoms in Europe,

the Mote of Mark also lacks the presence of recognisable ritual symbols of power. Palaces and previous Roman administrative centres do not form part of the architectural language and heritage of this area, but if this were indeed a capital centre, then one might expect some kind of ritual presence at the site. For example, Tara is built over a landscape of monuments spanning from the Bronze Age at the latest into the study period (Newman 1997, 2005). The higher section of Dunadd houses a foot carving, a motif which has been linked to royalty in Irish studies through comparison of the folkloric Indo-European motif of the single sandal: the *topos* that kingly figures lose a sandal at some point on their travels and adventures, before achieving kingship (Lane and Campbell 2001, 19–20; Mac Cana 1973). The limited settlement evidence and the absence of any recognisable symbolism argue against the Mote being a capital centre.

On the other hand, following the assumption that 'Trusty's hill was part of the same system, then there is another candidate for the main settlement of the ruling elite of this community. While this is difficult to judge until the site's publication unveils the entirety of its material culture assemblage, 'Trusty's Hill does offer two different points in favour of its importance: its layout and the Pictish symbols themselves. As for the layout, the site resembles a nucleated settlement, which is found at other key sites such as the already mentioned Dunadd (Land and Campbell 2001). The Pictish symbol has already been discussed in the Early Historic chapter (pp. 183 – 185): Thomas believes them to be an early seventh century commemoration of the destruction of the site by Pictish raiders (1961, 60, 69–70), however, there are several other possible explanations, including travelling craftsmen, the exchange of ideas and even the commemoration of an alliance by marriage (Cessford 1994). All of these possibilities are compatible with a display of power and symbolism. The very symbolic destruction of the site adds weight to 'Trusty's Hill being either the elite's residency or a capital centre, though the same may be said for the Mote of Mark.

The third option is that the Mote of Mark and 'Trusty's Hill may have acted as part-time capital centres within an itinerant kingship, not unlike that of early medieval Germany (Bernhardt 1993), which would help explain the idiosyncrasies of the archaeological evidence. Both sites were violently destroyed because of their equal association with a single ruling family, but the power symbolism is different at the two sites because whilst both capital centres, some ceremonies or religious ritual may have been carried out in one

or the other site depending on traditions. This reading still does not explain the seeming lack of kingly accommodations at either site, but it is nonetheless a valid option.

However, were the Mote of Mark and Trusty's Hill part of a kingdom-state on the southern coastline, it is difficult to imagine their complete absence from the written sources, and especially from the Annals. One might expect at least a mention of the fall of the area under Anglian control during the early seventh century, and of their violent destruction, if nothing else. The absence of any such mention renders the idea of the Mote of Mark area as a stable kingdom-state difficult to uphold. Despite this absence, it also bears mentioning that early historic kingdoms needed long periods of time to develop into archaeologically recognisable kingdoms. While the evidence for a kingdom around the Mote is tentative but inconclusive, there is evidence for a significant jump in social complexity from the multiple-leadership polity or polities of the previous period, as the Mote of Mark alone attests to. Thus, the final option is that both the Mote of Mark and Trusty's Hill were of similar standing and that neither site had yet managed to assert its pre-eminence over the other, despite them identifying as the same or highly similar societies, in much the same way as fifth and sixth century 'royal centres' in Northern Scotland, such as the aforementioned Rhynie, were yet to coalesce and assert their dominance over the entire landscape (Noble et al. 2013). Therefore, while probably not a kingdom yet, the Mote of Mark area was in the process of becoming one.

ON THE WESTERN COASTLINE

As for the western coastline, the archaeological evidence does not support, by and large, the same hypothesis: as it has been analysed in the Early Historic chapter, and summarised above, the western coastline is devoid of complex webs of hillforts and coastal forts which may be indicative of the effort to maintain and defend a stable territory, nor is there any evidence for settlements with a thriving economic production, with impedes theories of capital centres and developed economies. It, therefore, seems unlikely that the local communities had developed a unified society with higher social complexity than that of the multiple-leadership groups of the previous period.

There are two possible exceptions to this pattern. The first is that of another important sea-trading node around Stevenston Sands, more on which below (pp. 230 – 231). The area in itself does not present significant evidence for settlement complexity, though it does present some evidence of contact and trading, in a manner which could be

reminiscent of the hinterland of the Mote of the Mark. In this light, it is worth noting an interesting entry from the Annals for the year 658:

“658.3 The death of Gureit, king of *Ail Cluathe*” (Charles-Edwards 2006, 151)

Ail Cluathe is the Old Irish name for Dumbarton Rock, the site of a hillfort just north of the western end of the Antonine Wall, and just beyond the thesis’ study area. In the specific, the site is not far removed from the Stevenston Sands/Castlehill area, so it is not inconceivable that this area is linked with *Ail Cluathe*, which becomes a historically well-attested kingdom by the late seventh century (Fraser 2009, 1:135–136).

The second is the island of Bute, which may also have already become an integral part of the Dalriadan kingship emerging across Argyle, as seen in the discussion of the Early Historic phase of the fort (pp. 174 – 176). Again, it is worth noting that the island did not become the main focus, but rather a part of the bigger Dalriadan group, which was centred instead on the fort of Dunadd in southern Kintyre (Lane and Campbell 2001).

BOUNDARIES

A final question to be asked concerns the relationship between the Mote of Mark area, the western coastline, and the wider British world, especially *Ail Cluathe* to the north and Carlisle to the south. This question is borne out of the layered character of early kingdoms elsewhere in Europe: that is, the practice of local, weaker kingdoms to be subjected to a stronger kingdom and thus having to pay tribute and provide military assistance. An idealized version of this practice is recorded in Old Irish law, which states that there were four types of kings: *rí túaithe*, *rí túatha*, *rí cóicid/rí ruirech*, and *ruiri*. In other words, petty kings in control of only small territories, over-kings over a small number of the latter, over-kings over entire provinces, and ‘great kings’ (Kelly 1988, 16–17). While the likelihood of actual kingdoms in the fourth, fifth and sixth century in the study area has been deemed low on the basis of the archaeological evidence, the question of boundaries and power remains a valid one. However, this is a question whose answer would be better served by historical sources, given the limited extent of the archaeological dataset.

In broad terms, it has been suggested above that the north-western coastline during the Early Historic period fell under the control of *Ail Cluathe*, though how far south this influence spread is unclear. The southern coastline was possibly an integral part of the Mote of Mark community, though again, it is unclear how far their influence spread

eastwards and northwards. The Mote of Mark area was also close to Carlisle, which developed into a complex community which may be identified as an early kingdom, and which some scholars see as the heartland of Rheghed (Collins 2012; McCarthy 2002a). However, if any struggle for dominance between the two communities existed, there are no traces to be found in the archaeological record; it is also more likely on geographical terms at the very least that the primary target for annexation by Carlisle would be the Roman Iron Age Area 1, on which very little can be said in the Early Historic period. Lastly, it is possible that the communities on the western coastline owed at least a nominal allegiance either to *Ail Chuathbe* or to the Mote, though the extent of the control, if any, is unlikely to have been significant given the still-developing nature of the societies involved.

ON IDENTITY IN SOUTH-WEST SCOTLAND

In the absence of reliable written sources written by these groups themselves, identity is again gauged more in the different approaches to the ‘other’ as can be judged from extant material culture, in the same manner as the existence of different social groups in the Roman period was assessed through the diverse attitudes to Roman material culture. In the case of the Early Historic period, the archaeological evidence allows looking separately at four different coastline areas: southern, north-western and western coastlines and the islands.

The southern coastline is largely represented by the Mote of Mark. The idea of the Mote of Mark as a trading centre, coupled with the vicinity of Hadrian’s Wall, where Carlisle at least, of the closest Roman forts, still held a market (Collins 2012, 100), is an additional argument for the overall complexity of the region, especially when the scale of production and the range of reach of the site’s network, already mentioned in the Early Historic chapter (pp. 176 – 178), are taken into account. Looking at the material again solely from the perspective of interaction, the wealth of evidence overall can be ascribed to networking with four general groups, plus the moulds with Christian inspired decorations, which probably fit with at least two of the geographical trading partners. The four groups, the evidence for which has already been described at pp. 177 – 178, are, in order of importance as expressed by a number of items:

- i. Continental network, starting from the earlier fifth century Mediterranean traders up to the later sixth and early seventh Frankish/Merovingian traders (Campbell 2007).
- ii. Anglo-Saxon network, including the import of raw material – Whitby jet – and influence in decorative techniques like interlace (Laing 1973a, 33; Laing and Longley 2006, 102–114, 142–157; Laing 2006, 131).
- iii. Local network, evidenced by the import of Ayrshire shale (Laing 1973a, 32)
- iv. Irish network, a tentative possibility seen in the stylistic similarities between a single item and a Lagore pin (Laing and Longley 2006, 146).

It is therefore apparent that the site was both importing and exporting, probably capitalising on its coastline location and resources to insert itself as one of the main stopovers along the trading routes of western Britain. The only other Early Historic non-local items along the southern coastline area are the two sixth or seventh century AD beads found near New Abbey, and the pennanular brooches from Luce Sands (Material Culture Items, stray finds, item n.41). As for the beads from New Abbey, one comes from Ireland and the other from Southern England, as already presented. New Abbey is close to a minor river which flows into the western coastline of the fjord-like bay of the river Nith, approximately thirty kilometres away from the Mote of Mark itself, following the coastline eastwards. The thirty kilometres distance is approximately somewhere between nineteen hours for a convoy ship during rough weather and three hours for a single ship in perfect weather conditions (McCormick 2001, 482). Assuming that travel conditions fell somewhere in between, it is possible to speculate that there was an overnight or resupply point for the traders in the vicinity of New Abbey, which resulted in limited exchange and the beads found there. The two brooches from Luce Sands, an area with a sheltered bay, are consistent with Welsh brooches.

Material evidence of interaction along the western coastline is concentrated around the Stevenston Sands area and possibly at Castle Hill – another hillfort by the same name of that close to the Mote, further north close to the modern coastal town of Largs, where several convenient landing points are located. Stevenston Sands has already been mentioned (pp. 227 – 228): it has some unique brooches which render dating impossible and which may be evidence of contact and the exchange of ideas in either the Roman Iron Age or the Early Historic period, and the area has also yielded some armlets which

are consistent with Anglo-Saxon examples (Callander 1933, 26 – 34; Laing 1973b, 47; see Appendix 2).

Continuing this line of thought, it is interesting to note that the hillfort of Castle Hill, already discussed due to its excavation by Smith (1918), is located about twenty kilometres of coastline away, or between twelve and three hours, at the slowest and fastest convoy speeds calculated by McCormick (2001, 482), from Stevenson Sands. Castle Hill is located a short, albeit intense, walk away from the coastline of the village of Largs (fig. 52), and while the bulk of the material culture from the site has already been discussed as part of the Late and Roman Iron Ages period (pp. 182 – 187), Smith (1918) noted the presence of two objects for which his closest known reference was the Mote of Mark: a penannular brooch and a fragment of yellow decorated glass (see Appendix 2). Campbell agrees with this interpretation, and has since identified the glass as a fragment of a Group C continental bowl, a type of continental import of unclear provenance which may in fact be Early Historic, provided that the chemical profile is higher in potassium and magnesium oxide than similar Roman period bowls (2007, 64-68). It is, therefore, possible that the site, which belongs to an area with several crafting settlements (pp. 126 – 130) and is close to Largs with its enigmatic Roman finds (see Appendix 2), actually survived into the Early Historic period.

The remainder of the western coastline is devoid of imported Early Historic material culture, a pattern which deserves some thought in the overall discussion of the region. There are two main possibilities to explain the data:

- i. There is a lack of excavation of settlement sites from which material could be found, coupled with a survey bias skewed towards the southern and north-western coastlines. This possibility is hard to dispute, though there are stray finds from the preceding periods along the same stretches of coastline (see for example the numismatic distribution maps, figs. 7 – 10), so it is unlikely that this is the sole explanation.
- ii. The fragmented nature of the local social organisation hypothesised in the preceding section is at the root of the problem: the economy and wealth of this area were not capable of sustaining long-distance trade, so that there is no visible evidence of contact.

The second possibility is in keeping with the hypothesised settlement and social organisation pattern, though it must also be remembered that a lack of visible interaction is not the same as no interaction. Trading ships needed to shelter overnight and resupply regardless of the attractiveness of the local economy: it is therefore likely that the western coastline was still in contact with the rest of Britain and Europe, and still influenced by changes and ideas as recounted by the merchants. However, these communities could not afford the high-quality items which have left traces in the archaeological record, thus leaving any possible patterns and preferences an unknown variable.

The last site with any evidence for contact in the Early Historic period is Little Dunagoil in Bute, where trench B, an area with primarily Early Historic material, has yielded some worked and unworked green stone typical of Arran (p. 174). In terms of wider contact, there is a possible fifth-century Mediterranean pottery bowl, but it was found during the excavation of the Viking longhouses (Marshall 1964; see Appendix 2): contextually, it may have been misplaced, or it may simply have survived, perhaps as base material, for longer before its deposition. Overall, the absence of contact with the wider trading network of the west coast is another sign of the decline of the site since the Late Roman Iron Age (pp. 192 – 194).

DISCUSSION

Leaving aside the island of Bute, which seems to exist within its own small sphere of influence and probably did not form an integral part of the continental trading network at this juncture of time, this leaves the two areas which have been noted through settlement archaeology, once again split in terms of contact network. The Ayrshire shale at the Mote and the possible Mote of Mark brooch at Castlehill suggest that, at least for a period of time during the Early Historic, the two groups were in contact with each other, either directly or indirectly through the same group of continental traders. In fact, Campbell suggests that in the sixth century there was a single main trading route which ran through both the west coast of the whole of Britain and the eastern coast of Ireland (2007, 125-139).

However, it seems that the only area which was part of an exchange network with Ireland, at least in so far as is archaeologically visible, is the southern coastline, and then only to a minimal degree. In fact, while there is abundant evidence of stylistic borrowing and



FIGURE 52: PANORAMA TO THE WEST FROM CASTLEHILL (AUTHOR'S OWN)

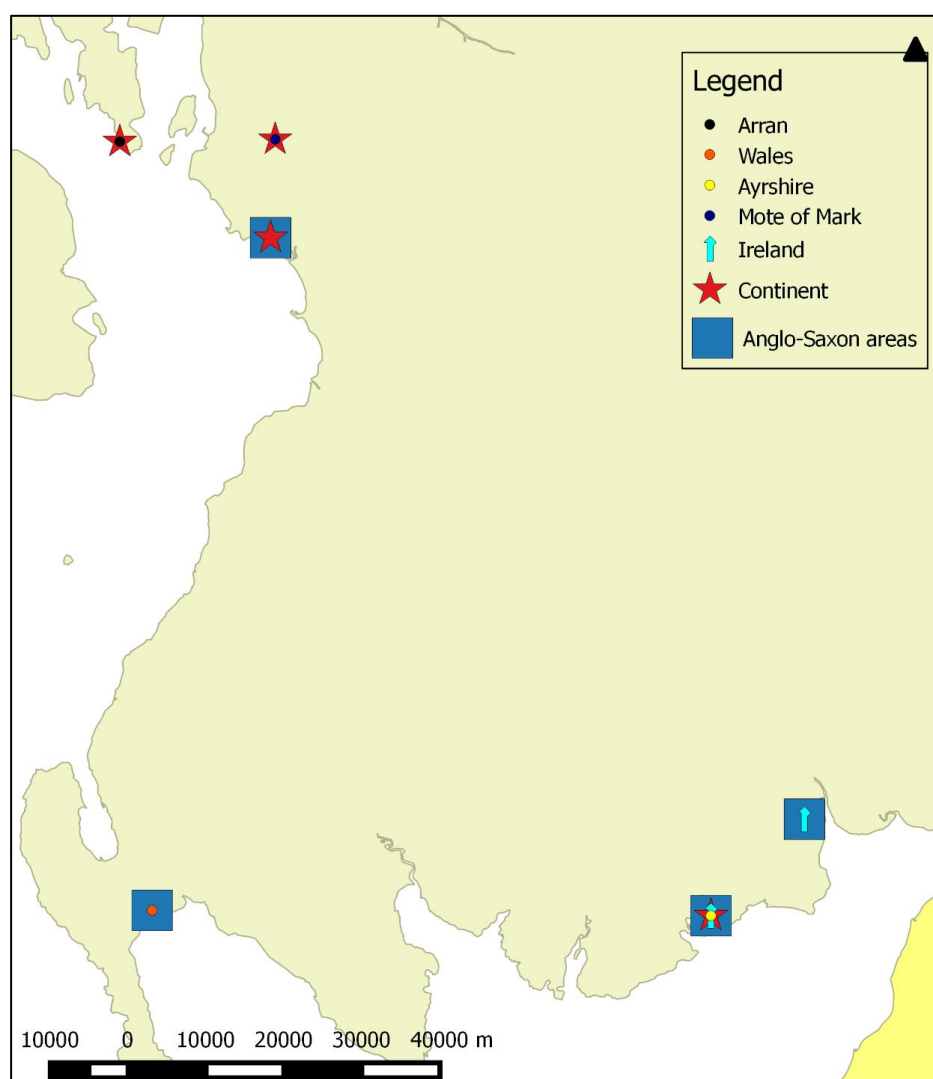


FIGURE 53: SPREAD OF EARLY HISTORIC IMPORTED ITEMS (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

imported items with southern England at the Mote, it has been noted how in comparison the evidence of contact with Ireland pales, unless the Christian items were meant for the Irish market through the continental trade system. The picture is more even at New Abbey, where out of two beads, one is Irish and the other is Anglian, but two stray finds hardly create a sound argument.

When one adds to this the fact that the number of items overall, Mote excluded, is minimal, it is entirely possible that this is not a true pattern, but a foible of the recovery bias. However, one might also note that a similar south/west split in the choice of trading partners was already just as tentatively suggested for the preceding period (pp. 157 – 160). In fact, one of the categories of items that only appeared in Areas 1 and 2, or in the southern coastline as described within the Early Historic period in the present work, is Irish. The repetition of the pattern, whilst not proof, adds some credence to this being an actual trend.

Following the assumption that the type of objects found reflects intentional choices rather than mere availability, then the difference in contact networks represents another layer which confirms the presence of two distinct groups in the archaeology of the period, probably more once we consider the dearth of evidence for the southern half of the western coastline and the fragmented settlement evidence. The patterns of interaction, then, tentatively confirm the presence of at least two distinct complex groups as offered by the settlement landscape analysis. The two groups were possibly trading directly, or indirectly through the continental trade routes, with each other. As for the latter, it seems that despite the fact that they probably interacted with the very same group of traders, the two exchanged different items, especially where Irish items are concerned, though the evidence is tentative at best. Beyond the two complex groups of the Mote and *Ail Cluaithe*/Stevenson Sands, there is a third group, or more appropriately, groups, which cover the remainder of the study area, including the islands, and are of more contained social complexity. Little can be said about them from the perspective of settlement beyond the lack of complex systems of coastline control, and even less about their interaction networks.

Given the proto-historic nature of the Early Historic, the next question may be that of the extent to which the separate identity of these groups survives in the written sources. In the absence of an Early Historic Ptolemy, the Annals offer the next best source of

information about identity, even if from the perspective of the Irish-speaking clergy. Skimming through the entries for the period under scrutiny, where identity is concerned, a distinct trend emerges, which can be best introduced by looking over a sample of these entries:

“473.3 The repose of bishop Doccus, a holy abbot of the Britons.

563.3 The battle of Móin Daire Lothar was won by the Uí Neill of the North against the Cruithni [...].

576 The battle of Teloch in Kintyre, in which [...] many [...] of the sons of Gabrán fell

631 The battle of Edwin son of Aille, king of the English [...], in which he was defeated by Cadwallon, king of the Britons and the Englishman Penda [...].

642.4 The battle of Osuiu against the Britons” (Charles-Edwards 2006, 74–144)

There are several more entries that could have been used, but these are indicative enough. To the compilers, the single most important facet of identity is not one’s kingdom or one’s leader, but one’s ethnicity in its broader sense, probably expressed best through language. They do not report the name of a single kingdom, but they talk of Britons, English, i.e. Anglo-Saxons, and Cruithni, i.e. Picts.

However, this is likely to be both the product of distance and importance: the compilers of the Annals, despite some interest in broad developments and happenings in Britain, were more involved in events taking place in Ireland itself. Thus the Irish-speaking groups mentioned are not generally described as ‘Irish’, but they are further defined by the name of their community: in the cases quoted in the sample, the entries read “the **Uí Neill of the North**” and the “**sons of Gabráin**” (Charles-Edwards 2009, 105, 110). Just saying ‘Irish’ would not have been enough to satisfactorily identify them to those for whom the annals were intended. On the other hand, the curiosity relative to events in Britain was satisfied by general ethnic reference. This practice can be paralleled to modern reporting, especially when one looks at individual news titles: local or national news will go into specific detail about the locations involved, while international news, if they pick up on

the event, are likely to primarily refer to the country in general. It is no surprise, then, that Gildas, whose audience was probably Brythonic-speaking, identifies two of his targets by name and group: they are Vortipore of the **Demetians**, and Constantine of **Damnonia** (§28, 31, Gildas 2006, 68–73). The other targets either had a unique name among the leaders of the period, or perhaps were famous enough that there could be no doubt of their identity, and thus had no need for another identifier.

While neither source is therefore helpful when it comes to identity in the Early Historic period, they suggest that individuals did not have a single identity, but several, and each as specific as the context required. The widest identifier was ethnic-linguistic, followed by the name of a specific polity, one which must have been stable enough to allow outsiders to understand the origin of the individual in question by the name alone. Status was certainly another important signifier, although the sources mostly allow visibility of the dichotomy clergy-leader: the examples above specify between, for instance, an abbot's death and that of a king (Charles-Edwards 2009, 74, 137).

The most important conclusion to be taken from this section is that the native groups of the Early Historic period of the study area were yet to develop into what is commonly understood as a kingdom: a united entity with a clear royal family line, and a central figure responsible for judicial processes according to a clear set of laws, and holding, to a degree at least, the right to military strength. While none of these clear criteria is testable with the existing evidence, the archaeological evidence is indicative of growing complexity and economic might in specific areas, but is lacking the symbolic aspect associated with kingship across most cultures. While there may be evidence in this respect waiting to be unearthed, until that day the most complex group socially, the one centred on the southern coastline, may be thought to be on the way to develop a native kingship, but the advance of the Anglo-Saxons stopped the process from reaching an archaeologically and historically visible stage. The material culture evidence for the rest of the region is even more fragmentary than that for the settlement landscape, but it is still indicative of a second area of potential complexity, though to a lesser degree than the southern coastline region, which may or may not have been part of, or absorbed into, the Dumbarton Rock sphere of influence at a later date. Regardless of allegiance, it is likely that all of these groups shared a common ethnic identity of “Britons”, but the historical evidence does not record the possible names of either of the two better-defined entities

11. A THEORY OF CHANGE

There have been a number of models proposed in order to explain the process by which, for instance, the loose ‘tribes’ of Caledonia become the Picts of North-East Scotland. Most of these models, which have been outlined in the Literature Review (pp. 19 – 32) fit into the mould of Roman studies. Be it by outright denial of any Roman involvement, or by suggesting that it was their actions which directly resulted in the Early Historic socio-political landscape of Scotland, the Roman occupation and frontier are an indissoluble part of these models. Beyond Scotland, studies of change in the Early Historic period have engaged with the rising complexity of the new Romano-Barbaric kingdoms in Europe, and economic historians have created models focussed on explaining change synchronically. However, and this is especially true for the Roman studies models, there has been very little dialogue between the proponents of different theories, and even less recent practical applications of these models beyond Hunter’s review of the formation of the Picts (2007), and its incorporation in Fraser’s overview of the development of Scotland in the Early Historic (2009).

As the settlement, social organization and relationship to the ‘Other’ – i.e. the proxy for identity which has been used in the thesis – have been presented, discussed and analysed in the previous chapters, they will not be reviewed further here, but for ease of reference, they are summarised in table 22. From these data, the product of this chapter is intended to be a working model of change for South-West Scotland in particular, albeit that the conclusions are derived from a 25% sample set, and rely on some very speculative interpretations regarding the dating and occupation periods of specific sites and certain patterns in hoard compositions. In fact, one of the key conclusions of Hunter (2007) study of society in Scotland, is that the archaeological landscape of the region is extremely varied and no single explanation can account for all of its diverse and sometimes contradictory data. Existing models, however, provide a framework in that they highlight through their strengths and weaknesses the particular elements which need to be accounted in a working model of change.

In practical terms, this means taking into account the following five elements:

	period	landscape	society	outlook on the 'Other'
Area 1	Early Roman	.primarily characterised by curvilinear enclosed settlements dedicated to mixed farming .possible boom of new settlements of rectilinear enclosed type either just before or during the Early Roman Iron Age	.single-leadership	.difficult and tense relationship with the Roman forces
	Late Roman	.abandonment of key excavated settlements .pollen cores suggest a rise in woodlands	n/a	. no change detectable
	Early Historic	n/a	n/a	n/a
Area 2	Early Roman	.mostly curvilinear enclosed farmsteads, crannogs and hillforts.	.multiple-leadership in the east .single-leadership around Dowalton Loch	.positive interaction with the Romans throughout the area .significantly more Roman items in the east, both in quantity and in variety, .limited but high-quality Roman items in the Dowalton Loch environs
	Late Roman	.abandonment of key excavated settlements	.no detectable changes	.availability of imported items decreases .counterfeiting operation attested at Brighthouse Bay
	Early Historic	. the Mote of Mark becomes the likely centre of power in the east .possible population drop in the western area	.single leadership/pre-kingship around the Mote .multiple-leadership in the western zone	.contact with the continent attested at the Mote and its immediate environ.
Area 3	Early Roman	. thriving hillfort at Little Dunagoil on Bute .several settlements and hillforts along the coastline of the mainland	.multiple-leadership society	. no data for the islands . limited secure evidence of contact for the mainland, mostly coins
	Late Roman	. possible economic downturn on the islands . tentative evidence of continuous occupation at key settlements on the mainland	n/a	. significantly reduced interaction with the Romans
	Early Historic	. limited changes . northern mainland may have become part of the Dumbarton Rock area	. no changes on the islands .possible growth in complexity in the northern mainland areas	. n/a for the islands .some contact with Southern England and the Mote attested at several locations on the mainland

TABLE 20: SUMMARY OF THE INTERPRETATION OF SETTLEMENT AND SOCIAL REALITY IN THE STUDY AREA

- i. Long-term narrative of a region: the importance of slow, internal changes, was particularly emphasised by Keppie (2004), who privileged tradition and internal tensions over external factors in explaining change.
- ii. Social reality: the changes in social organization and particularly in the complexity of a community, and the related process of creating and modifying identity over time, which have sometimes been correlated to the study of ethnogenesis (Goetz, Jarnut, and Pohl 2003).
- iii. The type of external contacts and the effect on the native social organization in the period preceding visible changes: in particular, the relationship with the Roman world and how the latter is perceived by native groups have been identified by all models as core issues.
- iv. The type of external contacts and the effect on native social structures in the period the change is visible: similarly, who each community interacted with, and the manner of the interaction, have also been considered key aspects in Early Historic models (e.g. McCormic 2001; Hodges 2010)
- v. Agency and opportunism: each polity's ability to affect their own environment directly, and to exploit wider changes in their favour, have been highlighted as central in most discussions of change, and as a centrifugal element to counteract the weight of tradition. Agency has been used both in a reactionary manner, i.e., answering to changed conditions (e.g. Heather 1994), or in a proactive manner, i.e. as the motor of internal changes (e.g. McCormick 2001).

A thorough analysis of the long-term narrative of the study area cannot be achieved, since only evidence specific to the very end of the Long Iron Age has been collected in line with the chronological focus of this study. Therefore, it is not possible to fully assess continuity or discontinuity patterns in the study area, by which it is here meant the persistence of specific settlement patterns, material culture markers, ritual deposition practices, funerary practices and patterns of social organization consistent with the thriving of a specific culture rather than the emergence of a different archaeological culture. To offer some practical examples, if the theory of a boom in rectilinear enclosed settlement within a cadastral grid in the Early Roman Iron Age of Area 1 had been accepted, that would have represented a discontinuity in the settlement pattern, which can be argued to be a marker of changing socio-cultural conditions. The foundation of

monastic houses in the Early Historic landscape of the study area can also be argued to represent discontinuity, following Hill's argument that *monasteria* specifically sought out underpopulated regions (1997, 66ff). On the other hand, an example of continuity within the study period is represented by the Dowalton Loch area during the Early Roman Iron Age, where neither settlement patterns nor material culture assemblages could be said to be significantly altered, the opposite of what has been here proposed for Area 1.

Some elements of continuity in the settlement landscape have emerged nonetheless, such as the continuation of broad settlement forms or the evolution of monumental households (Hingley 2007; Romankiewicz 2016), which have, in fact, rendered it difficult to securely date settlements on morphological grounds. Beyond the settlement landscape, there is an aspect of the ritual landscape on which data has been collected: the location of stone circles, standing stones, cup markings of all kinds, and cairns and other similar funerary monuments, which became prominent features in the landscape from the Neolithic period. The rationale behind their inclusion in the research design is based on the archaeological evidence of the Yorkshire Moors, where several studies, chief of which is Giles' recently published thesis, have indicated that linear monuments can be construed as the production and social maintenance of boundaries, some of which remained in use far beyond the initial construction event (2012, 45–53).

The sampled study area does not have a significant number of linear monuments (e.g. Brophy 2016, 48), but it does have several examples of the other monuments listed above, monuments which could have maintained their importance as part of the human landscape of the region well into the study period, as the example of Ireland suggests. A recurrent element of Irish hagiography, in fact, is the interaction of saints with prehistoric monuments, either breaking the current rules for proper approach to such sites, or appropriating them through ritual and folklore, thus layering Christian elements to counteract any lingering pagan values associated with them (Doherty 2005, 9–11). A practical example of the former hagiographical trend comes from a late sixth century text, Muirchu's *Vita Patricii* (White 1920), in which St. Patrick defies local customs and laws by lighting a fire within view of the Hill of Tara before the monument's own fire could be lit, which was forbidden (White 1920, 83–84). As for the latter trend, another sixth century Life of Patrick, Tirechan's *Collectanea* (Gwynn 1913), described how the saint temporarily brings back to life and baptizes a giant which had been laid to rest in a "*pulchrum magnum*

magnitudis mirae [...] pedes [...] cxx” (Gwynn 1913, 27), i.e. “an enormous grave of extraordinary size, ca. 120 feet” (author’s translation), which is consistent with the appearance of a cairn. While the meaning and value of these sites may have changed from their original function, the fact that Early Christian figureheads felt the need to embed these sites within the new ritual landscape suggests that they still retained importance within the local culture.

As figure 54 shows, funerary monuments are ubiquitous throughout the entirety of the sampled study area and are the most common recorded monument type for the interior of the region. The other classes of monuments, however, show more geographical differences in their distribution. In particular, standing stones and circles are found primarily less than twenty kilometres from the coastline, with the exception of the easternmost region of the sampled study area, that is, the zone which has here been

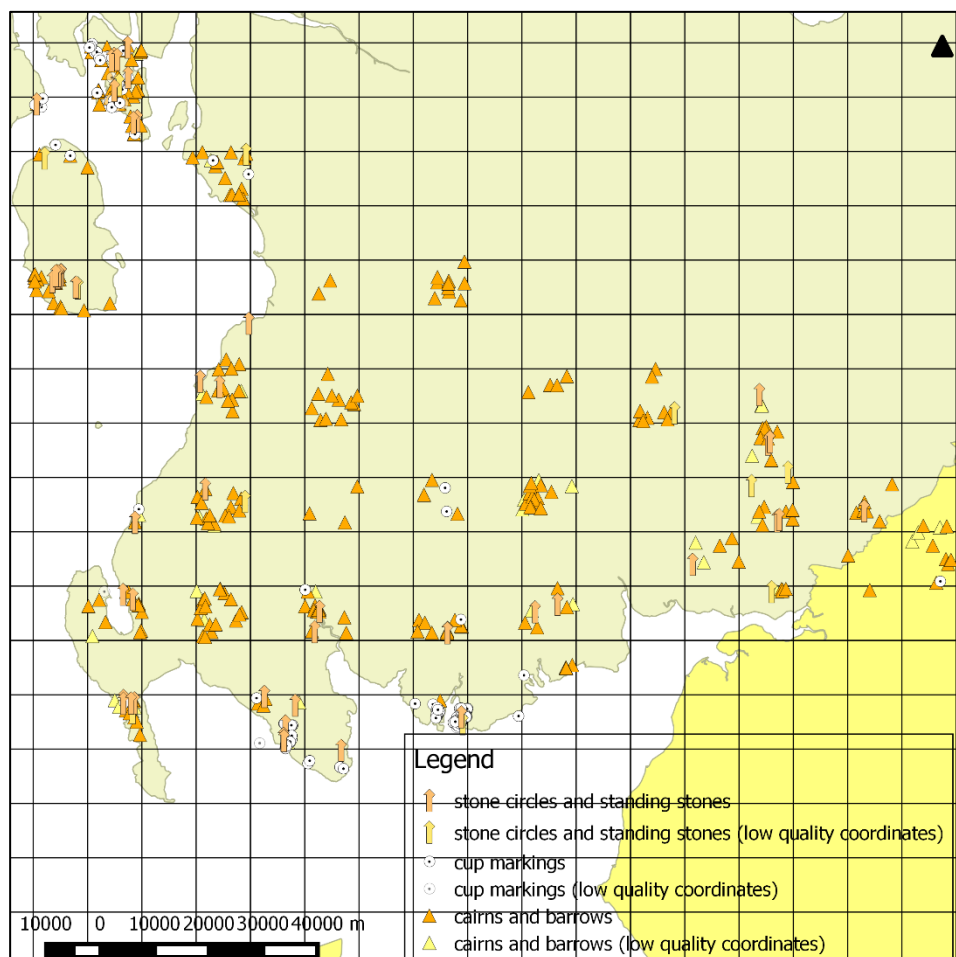


FIGURE 54: PREHISTORIC MONUMENTS IN THE STUDY AREA (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

referred to as Area 1. This is also the area which is mostly devoid of cup markings, which are otherwise common along the southern coastline, alongside the northern reaches of the western one, and on the islands.

If there is any meaning in this spatial distribution, then it would seem that Area 1 has had its own distinctive character and identity for a significant length of time. This, however, is the extent of the similarities between the prehistoric monument landscape and that of the settlement pattern for the late Long Iron Age, which certainly limits the depth of continuity for most of the sampled study area to the Bronze Age at the very earliest. The second element of long-term narrative for which evidence has been gathered in the thesis is that of natural locations where offerings to deities or ancestors could be made. The better understood one within the study area is Dowalton Loch, which, in fact, emerged as a key location during the Bronze Age.

The limited evidence suggests, therefore, the possibility of a far longer history for the communities of Area 1 and of the Dowalton Loch region of Area 2. If this possibility is correct, then it should be noted that, following the interpretation of the evidence set out in this thesis, neither of these communities survives through to the Early Historic period, despite at least the second one showing the most social complexity during the Roman period. However, this may not necessarily be because of the Roman occupation, or exclusively so, given the soil and climate deterioration, and the subsequent plagues and famines, attested in the Late Roman and Early Historic periods respectively.

Moving onto the second element to be considered, the archaeological evidence does not allow to discuss differences in social organization, identity changes and cultural norms between the Early and Late Roman Iron Age with any degree of detail, though it does suggest that a period of social stress and changes was underway during the latter. For instance, it has been proposed that the importance of Little Dunagoil begins to diminish in this period, as does, seemingly, the economy of Area 1, with a possible corresponding loss in settlements and, potential, population. The evidence for the Dowalton Loch area is inconclusive, but by the Early Historic period, there had been a population drop severe enough that the region was considered a suitable location for a monastic community in search of isolation. The trend, however, does not seem to be the same for the entire region: there is no indication of settlement abandonment in the northern reaches of the western coastline to the same degree as in the Dowalton Loch area, and there is the

possibility of a growth in complexity in the eastern region of Area 2, if the continuation of trade and the sponsoring of a counterfeiting operation are accepted as indicators. In fact, these are the two areas which can be argued to be the most socially complex in the Early Historic, considering the potential kingdom in the making around the Mote of Mark area and the relatively important trading area centred on Stevenson Sands and Castle Hill.

The dissimilarity in development between the macro-regions of South-West Scotland raises the question of the presence of any underlying differences which may explain the diverse conditions posited for the Early Historic period. The seeds of the changes seem to have been sown by the Late Roman Iron Age at the latest, as it is in this period that the first indications of change can be seen in the archaeological record. Be it the abandonment of Rispaing Camp, Castle O'er, Carronbridge, and possibly Teroy and Dowalton Loch as well, or the evidence for an increased economic demand which fuelled a counterfeiting operation at Brighthouse Bay, the common denominator of these changes is their chronological occurrence in the post-161 AD period. This chronology suggests once more that the Romans were a significant contributing factor to these changes, though differences in economic capabilities and access to trade routes between the different areas as the Late Roman Iron Age gave way to the Early Historic could also be key.

If the Romans themselves were a significant contributing factor to the flourishing or to the decline seen in the different regions of the study area, one might expect to find differences in the native/Roman interactions between the flourishing and waning areas. This is not necessarily the case. In Area 1, despite, or perhaps because of, the intense presence and perhaps even factual annexation within the province of *Britannia*, a tense relationship with the Roman world has been proposed, as mirrored in the destruction of Burnswark, the proposed, albeit possibly controversial, non-usage of Roman items in ritual contexts, and in the overall quantity of Roman items and their limited spread across different social groups.

Both the Dowalton Loch area and the north-western coastline had a similar relationship with the Roman world if compared to each other, with few but high-quality items filtering through. There are tentative grounds to argue a stronger impact of the Roman world on native customs, given the lost evidence from Largs (pp. 129 – 130) and the Romano-British dragonesque brooch of native make found close to the Loch (Hunter 1994;

Appendix 2). Still, their social development took distinctly different courses, with Dowalton Loch fading out of importance by the end of the Early Historic period while the north-western coastline can be argued to have become integrated into the possible kingdom of Ail Cluaithe attested in the seventh and eighth centuries.

The islands of Bute and Arran, on the other hand, had no attested contact with the Roman world, and like Area 1, which conversely had probably the heaviest Roman presence attested in the sampled study area since the Flavian period, seem to suffer economically and, probably, socially. Finally, the eastern zone of Area 2 had the most complex but positive relationship with the Roman world, with Roman objects trickling through all spheres of society and being considered acceptable as offerings in ritual contexts. During the Late Roman period, contact was continued, and indeed sought, possibly using sea routes to reach the visibly close province of *Britannia*. Assuming that the Roman treatment of the elites of the different groups was consistently similar, it cannot be maintained that the Roman presence in and of itself was the only catalyst for change.

However, it is the two areas with the most constructive interaction with the Roman world, the south-eastern coastline and the north-western one, which also show the most contact with other polities in the Early Historic and the most evidence of having potentially coalesced into more complex and geographically larger polities. The Mote of Mark and its hinterland is the most developed centre, with links to the Mediterranean in the fifth century and with continental Europe, Anglo-Saxon Britain, and possibly with Ireland in the sixth, which is consistent with earlier contact networks. Contact with the Picts is also attested from Trusty's Hill, and there is some evidence from Castlehill which suggests that the Mote area and the North-Western coastline were also engaged in contact with each other, be it through trade, diplomacy or hostile activities. Beyond the Mote region, the northern coastline shows evidence of contact with Southern Britain and possibly with the continent, though none of the sampled sites on the North-Western coastline can claim to have been a primary stop along the continental trading routes up the British west coast.

Whilst a significant part of the economic success of the Mote may be due to location, thanks to the transformation of Roman trade routes in the Early Historic period, the willingness to engage in this market and the ability to successfully engage in the network beyond the overnight and resupplying needs of the sailing crews, as must have been the case for western coastline, is an even more important aspect to the Mote's development.

By contrast, in fact, there is nothing to suggest widespread contact with the British Islands and the Continent at Little Dunagoil, which had been a production and trading centre during the Early Roman Iron Age, and for which the same argument of location and the convenient presence of a trading route which passed by the site can be made. Little Dunagoil does not seem to want to or be able to engage in the network, whilst the later *monasteria* at Inchmarnock and St Blane's do.

These differences in economic development in the Early Historic period may be due to environmental and population health stresses, which may have hit the study area inconsistently, but they may also be the result of different choices made by the neighbouring communities. For example, as the decline in Little Dunagoil began, it is not inconceivable that the neighbouring northern coastline of the study area begun to profit from additional traffic. In turn, the elite of the area may have decided to invest more resources in crafting or in food production, in order to further their own position and attract more traffic. This decision, in turn, may have resulted in the deepening decline of Little Dunagoil. Of course, this assumes that the northern elite was merely opportunistic in exploiting a neighbour's economic trouble, but it is also possible that the inability or unwillingness of Little Dunagoil and Bute to create, attract or maintain a contact network with the Roman world already in the Early Roman Period may have ultimately allowed the mainland hillforts, with their smaller production centres and their trade either with the Antonine Wall, or with the Roman ships sailing along the western coastline, to develop enough to be the root cause of the weakening economic strength of the islands.

Conversely, the elite inhabiting the future Mote of Mark area had engaged in a quantitatively significant exchange with the Roman world, which would have required an equally significant output, be it in food, leather, or metalwork, to be produced for exchange. Slavery may also have been an option, but it is one which is invisible in the archaeological record. This level of engagement may have supported the growth of a more powerful elite, which was then capable of both continuing to pursue contact with the Roman world in the post-Antonine period first, and with the Romano-Barbaric kingdoms which emerged in Europe during the Early Historic period later. The creation of the Mote, may, in this case, be argued to have been part of a deliberate strategy to maintain and attract the attention of the traders of these later kingdoms, through the bulk production of items of personal adornment.

The Roman Iron Age elite of Dowalton Loch, on the other hand, despite showing tentative evidence of being more layered and complex than in the remainder of the study area as sampled in this thesis, had a more traditional, ‘diplomatic’, and ultimately limited relationship with the Roman world, which never reached significant economic levels and which was not actively pursued in the post-Antonine period. The lack of an economic engagement may ultimately have put the single-leadership community of the Loch at a disadvantage when compared with the developing elite of the multiple-leadership community or communities of the eastern region of Area 2. Whether because they chose not to or because they did not have the resources to invest in such a venture, no centre such as the Mote was built in the Loch area. Other factors, climatic or health-related, may have played a part in the decline, but the choices made, or not made, by the leading elite may have ultimately proved more powerful, since changes in climate and any plague would also have been felt at the Mote of Mark and its network.

Now that the individual elements have been examined, it is possible to create a coherent narrative of the social changes of South-West Scotland at the end of the Long Iron Age. Let us start once more with Area 1. This is the region where the most dramatic changes in the settlement and in society during the Roman Iron Age have been proposed, but none of these changes survived into the post-Antonine period. This should not be taken as an indication of the overall null impact of the Roman Empire: despite the formal retreat, Hadrian’s Wall remained close at hand, with northern forts still occupied beyond the second century and the landscape still regularly patrolled.

Instead, it is possible that something akin to Macinnes’s dissolution theory was happening in the post-Antonine: the elite that had been co-operating with and benefiting from close contact with the Roman military lost their economic advantage, and the general disregard for the Roman world, hypothesised from the exclusion of Roman items in the hoard at Middlebie, if not outright hostility, as suggested from the evidence at Burnswark, fuelled the decline of their importance as the community’s old *status quo* dissolved. However, this is not the end of the process: the new leaders which emerged from the process had to contend with a drop in the productivity of the arable landscape due to over-farming in the preceding decades, and possibly with an accompanying drop in population numbers. In the meanwhile, the anti-Roman feelings impeded the development of a strong economic relationship with the forts on the Wall or beyond, which in turn hampered the

creation of an exchange economy capable of long-distance trade. As this is the key theatre of exchange and production of wealth in the Early Historic, by the fourth and fifth centuries the region had not developed the resources to compete effectively with the growth of the Mote of Mark. Area 1 thus faded from view until the Anglo-Saxon advance, either becoming a satellite area to the Mote itself or eventually falling under the control of Carlisle.

The changes in the Mote of Mark area, or the eastern zone of Area 2 as it was called in the Late and Roman Iron Ages chapter, are almost the obverse of Area 1. The local elite, either that which had been in power before or a new one which had capitalised on the Roman presence, built up economically through trade with the Roman military. Once the area was no longer under direct Roman control, the elite retained power, both because of the economic and symbolic capital accrued in time, and because the Roman world had not been perceived in the same negative way as in Area 1, which may be due to a less intense presence, the lack of a levy and the retention of the existing settlement pattern. The local elite continued to pursue contact with the Roman world first and then with the continental traders, building an ever stronger economic and power base in the meanwhile, probably in the same manner as Hodges envisioned for the rise of towns in Europe (1982). This power base became expressed in the Mote of Mark, a site which holds the most continental imports in the study area, and the most along the western coastline after Dunadd and, later, Whithorn. A similar process, of which only the southern tail is seen in this study, may be happening in the north-western mainland coastline.

Opposite the latter region, Bute had enjoyed a period of stability and growth which carried on into the Early Roman Iron Age, when Little Dunagoil was extended. The extension, however, was short-lived. The changes in the climate, which had begun in the same period, may have been felt more adversely on the island, but it is also possible that the previously thriving trading centre had been failing to adapt to the changing market, and the competition from the elite on the nearby mainland, with their new production centres boosted by trading with the Roman ships, may have furthered its economic downturn. When the island's elite failed to appeal to the continental traders as well, they lost access to the wealth and status coming from the south and faded from importance until the seventh century, when several new monasteries were founded along the coastline.

Finally, we return south to the western zone of Area 2. This was the most socially complex region, and it is likely, given the continuity in settlement and ritual during the Early Roman Iron Age, that the existing elite was the one on whom the Roman leaders focused their diplomatic efforts. It is unclear whether there was a significant enough exchange for either of Macinnes scenarios to apply. Although it does appear likely that Roman-style fashion was becoming desirable, the evidence is inconclusive. It is possible that the real reason for the decline of this area during the Late Roman Iron Age resides instead in the steady growth of the eastern coastline.

In fact, the elite of Dowalton Loch, which may have been one of the only two single-leadership groups of the Roman Iron Age, did not, on the basis of the archaeological evidence, develop strong economic links during the occupation period. In particular, they made no attempt to actively engage in trade with the Roman market, unlike the elite of the multiple-leadership communities of the eastern zone of Area 2, which may have been driven to compete for power with each other during this process. There are too many possibilities behind the choice made by the Dowalton Loch elite, some of which may be traditionalism or just the perception that there was not enough to gain in investing in the creation of a new network, but ultimately it may have been this inaction, coupled with the rise of the Mote of Mark group, which led to the decline of their power base. The lack of economic development may have been furthered by the climatic changes and by the plague episodes which, carried by ships, swept Europe. The Mote of Mark would have suffered to the same degree, if not more, but the production centre and the wealth it created may have better sustained the local population, and attracted survivors as a better option for the future.

Within the confines of this model, the process of change begins to gain momentum in the late second century AD, and it is fuelled both by external conditions and internal developments. Roman policies are the most important external factors to begin with, but later the development of a western trading network and the spread of the plague became significant co-factors in shaping the direction of the changes which began in the Late Roman Iron Age. Internal factors impinge on the different perception of the changing socio-economic conditions around each polity, and in particular in the decision of how to endure, incorporate or exploit such changes. In this respect, the theory here proposed merges social competition, a factor recently proposed by Cook as a possible explanation

for the diverse development of relatively similar areas in Northern Scotland (Cook 2011, 218), with internal factors such as agency, i.e. the actions taken to actively shape social reality, and the mental outlook which informs agency. The importance of perception and ideology in the process of change is a relatively new concept, but one which is being employed in the re-exploration of the ethnogenesis of Germanic-speaking groups in Late Antique Europe (e.g. Schmauder 2003), and of the process which led to the crisis and ultimate fall of the Western Roman Empire, as posited by Halsall (2007, esp. 63–110).

The importance of perception and agency in shaping the long-term development of the region may be paralleled to the recent overview of the fall of the Roman Empire by Halsall (2007). In his model, the decay of *Romanitas*, i.e. of what it means to be Roman and how much importance, value and social standing being Roman conveys, is a primary factor in the dissolution of the Roman Empire, leading directly and indirectly to the erosion of the military and administrative capacities of the central government. This particular model is extremely interesting and not disputed by the author, but on the other hand, Halsall's accompanying model of change for the regions beyond Hadrian's Wall is. Halsall (2007, 114 – 118) assumes that most of the region immediately beyond Hadrian's Wall has slowly coalesced, in no small part by Roman doing, in a single large confederation or coalition which relied intrinsically on Rome to support its power, both symbolically and practically through the giving of gifts. The late fourth century saw a significant rise in raiding by this coalition, the *Picti* of the written sources, because of the withdrawal of financial support. After the abandonment of the frontier ca. 400 AD, the severing of this power supply line caused the implosion of this large pan-Scottish confederation into small groups.

Halsall's model relies on the assumption that the development of the region beyond Hadrian's Wall can be compared to that of the region beyond the Rhine frontier, and so that all of the regions north of the frontier line had achieved an extraordinary level of unity by 300 AD: something which the level of fragmentation and extreme diversity within the archaeological record does not support at either a general Scottish level (e.g. Hingley 1982, 2007), or even within the confines of a single region like South-West Scotland, as seen in previous chapters. Even assuming that Halsall's single confederation is centred on a single elite group being actively supported by Rome and maintaining only a loose supremacy through a kinship and clientele network, a proposition which cannot be confirmed by archaeological evidence, it is hard to imagine that the break-up of such ties

would have as significant and long-lasting consequences on the fabric of society as implied by Halsall's interpretation (2007, 376), given that in this case, it is the existing clientele network, and not the structure of society, which would be broken. Even within the study area, it may be noted that contact between local groups continues largely unchanged from the Roman Iron Age to the Early Historic in those areas where evidence exists, as seen in chapters 9 and 10, a fact which argues against a complete loss of contact networks ca. 400 AD.

Beyond the social aspect, it may also be noted that the chronology along which lines Halsall sees the severing of the gift-giving policy does not coincide with that argued for by Hunter (2007), nor is his view of the frontier as an impermeable line (Halsall 2007, 140 – 141) necessarily applicable to the reality of Hadrian's Wall, where areas north of the Wall may, in fact, have been considered part of the province of *Britannia* (esp. pp. 67 – 95) regardless of the actual morphology of the physical frontier, which also retained a measure of permeability even in the fourth century (Collins 2012). It also is highly unlikely that the garrisons stationed at Hadrian's Wall left ca. 400 AD, given their local nature and leadership structure (Collins 2012). They may simply have become independent polities centred on the most important forts and *vici* (Woolf 2003). In other words, the end of Roman Britain is not considered to be a primary factor in the process of change for South-West Scotland at the very least in the model proposed by the author.

The model of change proposed here works on three core principles:

- i. It is not possible to analyse change at a micro-scale: the changes happening within neighbouring groups can affect, negatively or positively, changes within the group under scrutiny.
- ii. Both the period before changes are thought to happen and the period in which they are visible is important in understanding the process.
- iii. The perception, attitude and actions taken by the native populations are as important, if not more, than any Roman policy or established trading route. Otherwise, a single model would probably work for wide regions, without the need for micro-analysis.

Regardless of the particulars of this model, the third point is one which should be considered in future studies, as ignoring the actions and underlying culture of the polity

under scrutiny can only lead to models of change based on passivity, with the onus of change entirely on external factors. While there may be times where this idea is applicable, Scotland in the Long Iron Age is not one such period.

Unfortunately, this model is based on a series of interpretations which, while possible, require additional data, and especially secure chronological data, to be considered more than theoretical. As such, this model, while plausible, could easily become invalidated as newer excavations and data filter in. However, even if that were ultimately the case, it may still inspire a more complex approach to the idea of social change.

In conclusion, the evidence gathered in the preceding chapters has now come together to allow the creation of a model of social change based on the interplay of the internal changes of each of the different polities of South-West Scotland. Unlike most existing theories, it is also based on a diachronic view of change, with the changes happening during the Roman period being tempered or reinforced by choices made during the Early Historic one. Another important point to be taken from the model is the emphasis on the choices and attitudes to the outside world of the individual groups, or more likely, of the elites which led them.

In this model, the growth of the economic and political capital of the area which is to become the hinterland of the Mote of Mark begun during the Early Roman period through constructive contact and trade, which was later actively pursued during the Late Roman period. This trade allowed the local elite to build enough power to begin unifying the southern coastline and develop the capital necessary to create the Mote of Mark. Meanwhile, the elite of Dowalton Loch, although not hostile to the Roman world, was not investing in any significant trade with it, in archaeologically visible ways at least, and thus began to lose power to the Mote of Mark elite. The same may be said for the area closest to Hadrian's Wall, where contact, once no longer enforced, fell rapidly, probably fuelled to some degree by resentment against the massive settlement landscape and social changes brought about by the occupation. The northern stretches of the western coastline were developing in much the same way as the Mote of Mark area, probably investing resources in sea-trade along the western coast. Again, the growth in economic power and importance of the mainland hillforts was, once more, both helped by and instrumental in the decline of Little Dunagoil on Bute.

It has already been remarked that the particulars of the model itself are reliant on archaeological interpretations which may easily be disproved as new dates and sites come to the fore. It is hoped, however, that the premises on which the model is based will influence future models. The acknowledgement of the importance of longer narratives and of the interplay between different polities allows for more nuanced and complex readings than some of the more generalised theories put forward in the past.

12. CONCLUSION

The original goals of the thesis, as stated in the Introduction, were:

- i. To assess and discuss the archaeological evidence of South-West Scotland for the Late and Roman Iron Ages and the Early Historic period;
- ii. To analyse the social reality of the native population during these centuries;
- iii. To create a model of change from the Roman to the Early Historic period specific to the study area.

The first goal could not be fulfilled in its entirety because of the nature of the archaeological evidence, which, barring a limited number of excavated sites, does not allow to accurately date on morphological grounds sites of the Late Iron Age. In practice, this translates to the masking of internal developments, especially between the pre-Roman Iron Age and the Roman Iron Age, since the latter is visible primarily where exchange between the native and Roman worlds took place. Beyond chronological difficulties, the majority of the existing research is focused on Eastern Dumfriesshire and the coastline areas of South-West Scotland, leaving a void of known settlements in the interior.

The uneven nature of the landscape surveys, the lack of widespread secure dates and the overall limited amount of chronologically diagnostic material culture has also hindered the interpretive process. As a consequence, the conclusions reached regarding the social reality and the process of change in the study area (i.e., goals .ii and .iii) are to be considered tentative, and only one of many possible interpretations. Nonetheless, this final chapter will focus on these conclusions, and to their possible consequences for the scholarly understanding of Late Iron Age and Early Historic Scotland.

The evidence as interpreted here is, in fact, suggestive of a multifaceted and constantly changing society, more complex and nuanced than the South-West is usually assumed to be, though the quality and quantity of the evidence are not sufficient to draw secure conclusions. At a general level, the uneven distribution of monumental households and rectilinear enclosed settlements suggests that by the Roman Iron Age the settlement landscape was subdivided into three broad zones, one sweeping north and inland from Hadrian's Wall, one running along the southern coastline and up halfway along the western coastline, and a third zone including the islands and the northern stretches of the mainland coastline (fig. 12). This tripartite subdivision is further mirrored during the Early

and Late Roman Iron Ages in slight differences in the way the different communities chose to interact with each other and with the Roman world. Different patterns of interaction with the latter are particularly expressive when examined in direct contrast with each other, in particular in the case of ritual depositions and in the effort expended in maintaining a trade network with the province of *Britannia* in the Late Roman Iron Age.

This tripartite subdivision also mirrors fairly closely that recorded in Ptolemy's *Geography*, which may, therefore, prove of more value in the study of the social landscape of Roman Iron Age Scotland than is sometimes recognised. Against the evidence of broad regional similarities, however, the settlement pattern could be construed as highly indicative of fragmentation at a micro-scale in most of the study area, with several hillforts and monumental households presumed to be inhabited synchronically without any pattern indicative of significant stratification between them. However, it is impossible to be certain of synchronicity in the absence of scientific dates, so this is an extrapolation based on morphology, line of sight analysis, material culture – where available – and the scientific dates which are available at present. While this reading is therefore open to challenges, the social fragmentation it describes is reminiscent of the social assessment of Southern Scotland given by Tacitus in the *Agricola*: i.e. a number of small groups, each led by a leader of limited economic and social power, but capable of coalescing under a single figure in times of crisis and war. This social structure, for lack of an effective label to describe it in the anthropological record, has been termed as multiple-leadership society.

There are two possible exceptions to this assessment: the area around Dowalton Loch, and the area immediately north of Hadrian's Wall. In the former, it is possible to suggest that the local elite had accumulated a significant social capital through the monopolization of the symbolic power imbued in the ritually significant Loch, a liminal area where offerings had been deposited since the Late Bronze Age at least. This possibility was argued on the basis of the foundation of possible Late or Roman Iron Ages crannogs on the lake, coupled with the nature of singular, high-status ritual depositions in the lake, as opposed to the possibly community-wide effort to gather the items that formed the Carlingwark Hoard. Beyond Dowalton Loch, a case for the importance of symbolism and, possibly, archaism, was made for another settlement, Rispaig Camp, which might have been inaugurated through the secondary deposition of mixed human bones. To reflect the potentially higher social stratification of this particular area, its society was

described as single-leadership, though it was also noted, pending the interpretation of Teroy, that this particular social arrangement may not have survived long past the Early Roman Iron Age.

In the area immediately north of Hadrian's Wall, historical evidence suggests a closer integration in the Roman province of *Britannia* than it has ever been considered possible for any region of Scotland. An inscription from Umbria, Italy, suggests that a census of the Annandale region was carried out *before* the official Roman occupation of Southern Scotland and the construction of the Antonine Wall. The Vindolanda tablets further corroborate the inscription, as they suggest that a levy of the inhabitants of Southern Scotland was carried out, with the conscripts trained at Roman installations on the Stanegate frontier. These social changes may also have been reflected in significant settlement landscape changes, and in particular, an increase in the number and in the social stratification of settlements, as seen in the analysis of rectilinear enclosed settlements and Castle O'er.

However, the number of social changes brought about by the military occupation of the region may have been the basis for resentment and even outright hostility towards the Romans. Evidence for the latter is expressed by the heavy military presence in the Annandale Valley, by the potential hostile burning of Birrens, and especially by the possible Roman siege and destruction of Burnswark. Evidence for this interpretation can be found in the exclusion of Roman items in ritual contexts and in the limited spread of Roman material culture, both traits particularly significant when compared with the evidence from the modern councils of Kirkcudbrightshire and Wigtownshire.

Further evidence comes from the possible abandonment of the settlements that had thrived or had been founded during the Early Roman Iron Age after ca. AD 160, though the number of excavated settlements, and thus the number of settlements whose abandonment date can be securely gauged, are few in number. Beyond this possible settlement abandonment, there is a lack of engagement, in so far as it is archaeologically visible, with the Roman world, despite some Roman presence still being maintained north of Hadrian's Wall. Archaeological evidence for the Late Roman Iron Age onwards dwindles down to a single building beneath the Anglian monastery at Hoddum, so it is difficult to accurately assess the long-term consequences on the social, cultural and economic development of this area. If the lack of evidence from the Early Historic period

is interpreted as an actual pattern, then it may indicate a loss of social complexity and living conditions, and possibly even depopulation, after the Roman withdrawal from this sub-region.

The opposite is true for the central-southern coastline, whose elite and population had thrived and engaged in trade with the Roman world during the occupation period, and then continued to invest in such trade, even to the point of counterfeiting currency in the post-occupation centuries in order to continue doing so. Over time, this engagement encouraged the growth of more complex ties among the elite of the area, which ultimately led to a significant increase in social stratification, one which, if given time, may have ultimately resulted in the creation of a native kingdom. The creation of a production centre at the Mote of Mark, perfectly located to take advantage of the trade network linking the western coast of Britain to Ireland and Europe, is perhaps the greatest testament to the success of this region. A similar process may have been taking place in the northern stretches of the western mainland coastline, with the elite of this area probably centred by the Early Historic on Dumbarton Rock. As it is, however, the written sources examined here do not allow to infer the presence of a kingdom-state in this region, though this need not be the only interpretation, as will be touched upon briefly later.

This accretion of power and the creation of an ever more complex society are particularly impressive when considered alongside the precarious conditions of the Early Historic period, with a significant cooling in the fifth and sixth centuries AD indicated by ice cores and dendrochronological evidence across the Northern Hemisphere, and with endemic warfare and bouts of plague sweeping Europe recorded in the written sources. These conditions may well have played a significant part in the decline of the remainder of the study area, including Bute, which had been a thriving centre up to the Early Roman Iron Age. Internal processes, however, should not be discounted as driving forces of this decline: the different attitudes to the Roman world may have resulted in a differential accumulation of wealth, resources and networks, which ultimately allowed less complex polities to outshine the initially more complex ones. This is particularly evident in the Dowalton Loch area, whose elite seems to fade in importance and in its ability or willingness to sustain long-distance trade.

The end result of this decline is seen in the foundation, towards the end of the study period, of a number of monasteries in these areas. These foundations are potential

indicators of depopulation, given the preference of monastic communities of this period to settle in uninhabited areas (Hill 1997). The most famous of these monasteries is Whithorn, which quickly grew to be one of the most important centres along the western coastline of Britain and ultimately outlived and outshone the Mote of Mark area, whose key sites were destroyed in the early seventh century and never re-occupied. Beyond Whithorn, monasteries were also founded on the island of Bute and at Hoddom.

The underlying thread of this narrative is that of agency: the driving force of these changes is neither the Romans nor the development of the western trading route in the Early Historic, but the attitudes and actions taken by the people who inhabited the region in response to the changes which were taking place around them. Because of the limited nature of the evidence available, it is not possible to extrapolate further and explore the changing identity of these communities, as has been done for the Germanic-speaking communities which became the Romano-Barbaric kingdoms of Europe (e.g. Roymans 2009). Nonetheless, the archaeological evidence still opens a potential window on the social organization, economy and cultural norms of the polities of these periods.

As already stated, however, this interpretation is based on more than one occasion on unclear evidence and potentially controversial readings. For instance, it is argued that the society at Dowalton Loch was unique and the most advanced in Area 2 during the Early Roman Iron Age, but it could be countermanded that other lakes housed crannogs as well, and some of them, like Carronbridge, also preserved ritual offerings, though they lack the long history of Dowalton Loch. Nevertheless, an increase in the understanding of crannog-dwellers and new discoveries may challenge the primacy of Dowalton Loch as espoused here.

Rectilinear enclosed settlements in Area 1 have been linked to the Early Roman Iron Age, whether directly or indirectly, as has the relationship between a number of hillforts and their possible ‘satellite’ settlements. Yet, using the evidence from the rectilinear settlements of Northumbria (Hodgson, McKelvey, and Muncaster 2012) as a parallel, it might be argued that the rectilinear enclosed settlements of Area 1 are entering a period of decline during the Early Roman Iron Age which precedes their abandonment ca. 140 AD, which might indicate an even more widespread rejection and hostility to the Romans, or some other social changes which are invisible with the evidence available. Likewise, much is made here of the absence of Roman items from Middlebie, yet were this hoard

interpreted to predate the Roman period, it would undermine the overall interpretation of the social changes proposed for the study area.

As per Area 3, the interpretation of the evidence is based primarily on a small core of settlements which were excavated approximately a century ago and not to modern standards. The original interpretation of the Roman destruction of one of them (Coal Hill) was here rejected, yet, were it found to be accurate, it could indicate a split society with regards to the willingness to interact with the Roman world, much as has been suggested for Area 1. As for the Early Historic reading of this area, a link has been proposed to Dumbarton Rock, which needs to be proven. The interpretation of Little Dunagoil has also been based on material culture and stratigraphy from old reports, and much has been based on the absence of evidence, which is a potentially dangerous practice in archaeology. This region's development may, in fact, have been considerably different to what has been proposed here.

Area 1 is another area whose Early Historic development could be entirely different from the one proposed. Again, the interpretation followed in the thesis has been based on the absence of evidence, coupled with the assumption that Hoddum's origins may be similar to Whithorn's. However, this need not be the case. In fact, it could be argued that in other locations monasteries were often linked to kings and successful elites, so that the Area may, in fact, have been as complex as that of the Mote of Mark, and it may even have been one of the original *fovi* of the kingdom of Rheghed, usually associated with Carlisle. A case for the Mote of Mark/'Trusty's Hill area for being the core of the kingdom of Rheghed could also be made, either based on a different interpretation of the written sources used here, or as a study in the different perception of the near past by the non-Anglian communities of Early Historic Britain.

With this in mind, there is significant potential for future research especially in the further exploration of the possible patterns noted in the analysis. In particular, there are seven such immediate avenues of research:

- i. Annandale and *Britannia*: the conjunction of archaeological and historical data in suggesting the possibility of formal integration of the region immediately north of Hadrian's Wall into the Roman Empire bears further research, as it is not only intriguing but also may rewrite the history of Southern Scotland in the Roman

Iron Age entirely. The as yet unproven thesis of a settlement boom also requires further exploration, especially in terms of site exploration and dating.

- ii. Dowalton Loch, Rispain Camp and the role of ritual in harnessing social capital: the characteristics of the assemblages at these two settlements may be interpreted as evidence of stratification via the acquirement of ownership or validation from the ritual domain. However, this interpretation is tentative and requires further exploration of other potential such sites and a better understanding of the crannogs from Dowalton Loch, ideally with radiocarbon dating where possible to also explore the chronology of this socio-cultural shift.
- iii. Monumental Households: given the mounting evidence for the wider occurrence of duns and brochs over longer timescales, and for their importance within the sociocultural landscape of native societies (e.g. Cavers 2010) the dating of the South-West duns, and of the brochs in particular, is in urgent need of being confirmed through the procurement of scientific dates.
- iv. The context of Hoddum: The Early Historic non-Anglian settlement landscape of the area immediately north of Hadrian's Wall is almost blank beyond the single site of Hoddum, which impedes any meaningful discussion of the social development during the post-Roman period. The development of the monastery and the absence of dated hillforts with Early Historic assemblages has been interpreted here as evidence for decline and crisis, but the absence of evidence need not be more than a modern bias. A possible starting point would be to re-evaluate the surrounding countryside using modern survey techniques, such as LiDAR (Chase, Chase, and Chase 2017) and soil analysis (e.g. Patrick Fazioli 2014), coupled with an analysis of later historical sources and place names (e.g. Rucco 2015).
- v. The Early Historic period along the south-western coastline: as above, the interpretation of this zone has been based on the absence of evidence, especially when confronted with the reality of the central-southern coastline and the north-western coastline. Yet, given the flourishing trade network along the western coast, contact and exchange must have been taking place here as well, if for no other reason that traders needed fresh water and food supplies. This interaction and its possible consequences on social and cultural changes ought to be better

understood, alongside the relationship of this coastline area with the Mote of Mark region and Dumbarton Rock.

- vi. North-western coastline: the geographical limits of this study excluded the site of Dumbarton Rock and its hinterland, because of the lesser quality of the data record available compared to the rest of the landscape, as explained in the Methodology section (p. 33). However, Dumbarton Rock is one of very few historically attested Brythonic-speaking kingdoms of the Early Historic period, and it may prove interesting to test the conclusions reached here for the northern coastline with the existing research (see especially Fraser 2009).
- vii. The interior: this area has usually been glossed over under the assumption that it was uninhabited or uninhabitable, but the lack of any modern survey may be more to blame for the absence of settlements than an actual dearth of settlements in the prehistoric period. The outcome of a wide-scale survey of the interior will doubtlessly impact research for the entire history of South-West Scotland, both before and after the period covered by this thesis. As such, this is both the avenue of further research with the most potential, and which is the most pressing.

In conclusion, this thesis has shown that the available evidence for the region allows building plausible theories on the social structure and development of native societies, and even glimpses of their identity and beliefs, but not to prove them, because of the lack of secure dating and modern surveys. This region may perhaps no longer be part of the “the dark side of the moon” (Alcock 1992) but significant research still has to be done before its development can be comprehensively and securely understood. Despite its shortcomings, this thesis hopes to represent a starting point in that direction.

APPENDIX 1: THE LANDSCAPE

SITE TYPOLOGIES – KEY

Burnt Mound: small feature, probably built for outdoor cooking purposes

Cup Markings: cup markings, and cup and ring markings, on both rock faces and standing stones

Enclosure: enclosed space, likely used for farming and/or agricultural practices

Funerary monument: a site linked to the treatment and burial of the dead

Cairn, Barrow and Mound: a funerary monument resembling a small hill

Other Funerary Monument: all other funerary monuments.

Miscellaneous non-settlement site: an archaeological site which does not fit any of the other groupings. Examples include caves, middens, and mines.

Early Christian Sites: possible pre-Anglian Christian sites of religious nature, founded before the mid-seventh century AD

Monastery: monastic community

Cross: free-standing cross monument or inscribed cross

Roman monuments: Roman sites

Roman temporary camp: military installation for short-term occupation

Roman fortification: fort, or other military installation of permanent nature

Roman road: a stretch of excavated Roman road

Standing stones & Stone circles: stone ritual architecture

Hillfort: a naturally defensible site with outworks designed to limit access, which may or may not also include a settlement

Promontory Fort: a hillfort located in a prominent coastal location

Settlement: a place of human habitation

Defended & Substantial settlement: a settlement with defensive outworks, and/or a settlement which makes a definitive statement either by its architecture or location

Broch: circular house, with thick stone walls, developed in height

Crannog: household built on an artificial island in a wet location

Dun: circular house built with thick stone walls

Enclosed settlement: a settlement with a definite boundary

Curvilinear enclosed settlement: enclosed settlement with a curvilinear boundary (e.g. oval or circular)

Rectilinear enclosed settlement: enclosed settlement with a rectilinear boundary (e.g. rectangular or trapezoidal)

Open settlement: a house or group of houses without an archaeologically visible boundary

Miscellaneous settlement: a settlement which does not fit into any of the other groupings

Souterrain: underground storage facility

GENERAL NOTES

This appendix contains an introductory description of each of the sampled tiles, and a map for each of the tiles, detailing all of the sites of interest to the thesis within its boundaries. Unlike the maps contained within the main body of the thesis, which only included sites with recorded locations with at least eight coordinates number, these maps contain all listed sites. Those sites with lower quality coordinates are listed as such in the legend. Key sites, and all sites mentioned by name in the descriptions, will be accompanied by either their Canmore ID number or by their ADS Import Reference Number, which can also be used to locate them on the map.

NR92 – ARRAN (FIG. 55)

Tile NR92 covers most of the south-western coastline of Arran and part of its interior. Its physical landscape is characterised by sudden changes in elevations. Archaeological sites are mostly concentrated along the coastline and along two tributaries of the Sliderry Water – the river which runs roughly along the centre of the tile. The latter area also hosts a high concentration of standing stones and stone circles: hinting at a higher human presence in prehistoric times than the settlement evidence suggests. The latter is in fact comprised of four clusters of hut circles, two duns, one of which (Kilpatrick, 39637) is associated with a stock-control wall, and several hillforts, most of which are located close to the coastline in the south-east quadrant of the tile.

NR94-NR95 – ARRAN (FIG. 56)

These two tiles, which cover the northern coast of Arran and part of its interior, represent the exception to the geomorphological characterisation of the study area presented in the geomorphological section (pp. 17 – 18) and are part of the Highland zone: as such, they are characterised by extremely steep slopes and high elevations. The sparse archaeological landscape is likely a reflection of the hostility of the natural one. Three cairns, close to some of the waterways of the tiles, and two cup marks represent the totality of the prehistoric monuments left on the

island, while a single hillfort stands at the top of the steep cliff overlooking the fjord-like bay which cuts through the coastline. There are no other traces of human habitation.

NS05 – BUTE (FIG. 57)

Tile NS05 represents the south-western tip of the island of Bute and the southern half of the island of Inchmarnock. The physical landscape is mostly characterized by even slopes. The prehistoric monuments group is varied and well represented: cairns, barrows, mounds and cists are all present and located either near the top of elevations or along the coastline, in prominent positions. Cup markings are present as well, and are concentrated in two clusters: one along the slopes either side of the northernmost bay of Bute, and another in the south-east quadrant. There also is a possible standing stone alignment at Largizean (40257), which runs roughly parallel to the line of the nearest elevations to the south, in a north-west to south-east direction. In the Early Historic, monasteries were founded at St Blane (40292) and Inchmarnock (202420). The most common archaeological features throughout, however, are promontory hillforts, which include Dunagoil and Little Dunagoil (40291; 40280). Settlements are concentrated in the north-west and south-east quadrant of the tile. The former quadrant houses mostly substantial households: there are

two crannogs within the lake, and two duns looking southwards towards the bay. The latter quadrant is comprised of unenclosed households.

NS06 – BUTE (FIG. 58)

Tile NS06 also covers part of Bute. It is characterised by steep slopes and short brooks, with several lakes in the south-east quadrant. The most common prehistoric monuments are cup marks and cists. The cup markings are mostly located on the steep slopes overlooking the stretch of sea between the island and mainland Atlantic Scotland; while cists are situated in prominent, visible location, like the cairns and barrows in tile NS05. The most common settlement type is open: most of these sites are small hut circles, between 6m and 7m in diameter, with no associated enclosures. Substantial households include a crannog (Loch Dhu, 40380) along the shores of the smallest lake, in the south-east quadrant of the tile, and two duns, one in a promontory location (Castle Cree, 40441), and the other one (Dun Burgidale, 40300) in a secluded location in the hinterland, within a very large non-defensive enclosure. A large, walled hillfort (Barone Hill, 40424) in the south-east quadrant of the tile completes the archaeological landscape.

NS14-NS24 – AYRSHIRE (FIG. 59)

The physical landscape of these tiles is hilly, with some steeper slopes in the north-west quadrant of tile NS24. The area is rich in running water, with several brooks and rivers feeding numerous lakes before draining into the sea. Cairns and similar monuments represent the bulk of the prehistoric monuments of these tiles, though there also are cup markings in the interior of the tile, and a small number of standing stones. Settlements are fairly well represented in the tile, with several curvilinear enclosed settlement in tile NS14 and in the north-west quadrant of tile NS24, which also

houses several open settlements. Substantial households are represented by two duns, one in the hinterland (Coal Hill, 41013) and one in a coastal location (Boydston, 41112); and by two crannogs, Ashgrove Loch (41054) and Todhill Farm (41055). The latter now sits on dry land because of landscape changes. There are also four hillforts, one near the delta of a small river in the north-west quadrant of tile NS24 (Seamill, 40997), and the other three (Law Mill, 41028; Knockjargon, 41099; Diddup, 41094) located on a straight, albeit imaginary, south-east line in the interior of the tile.

NS20 – AYRSHIRE (FIG. 60)

The physical landscape of tile NS20 is characterised by rolling hills with gentle slopes, with steeper slopes in the south-east quadrant. The most common prehistoric monuments are cairns, mostly found close to running water or parallel to it. Settlement evidence is more abundant in the southern quadrants of the tile, which houses open settlements, curvilinear enclosed settlements, and the northernmost rectilinear enclosed settlement within the sample study area (Ladybank, 296913). Substantial households are represented by a crannog (Lochspouts, 40831) and three duns. Of these, two are landlocked (Craighead Hill, 40890; Mote Knowe, 40866), while the third one overlooks the delta of the nearest watercourse (Captain's Bridge, 40868). Two hillforts (Kildoon Fort, 40829; Hallowshean, 40853), both in elevated hinterland locations in the northern half of the tile, complete the archaeological landscape.

NS21 – AYRSHIRE (FIG. 61)

The physical landscape of tile NS21 is rugged, with steep cliffs facing the western coastline –though not as steep as in NR94-NR95. Perhaps as a consequence, whether factual or of survey bias, the archaeological landscape is relatively devoid of sites. Prehistoric

monuments are represented by a mound and a cairn placed along the southernmost river, and by a standing stone close to the coastline in the north-east quadrant of the tile. Settlement evidence is limited to the southern quadrants of the tile, where two curvilinear enclosed settlements and three duns are located (Dead Knowe, 40961; Howmoor, 40952; Balchriston, 40957). The archaeological landscape is completed by three hillforts, two in a promontory position (Bower Hill, 40933; Knoweside, 128025) and one in the hinterland (Dunduff, 40936).

NS80 – LANARKSHIRE (FIG. 62)

The landscape of tile NS80 is characterised by high elevation with steep slopes, especially in the north-east quadrant. Prehistoric monuments occur primarily in the northern half of the tile, occasionally close to running water, but always in elevated and visible positions. Settlement sites, both open and enclosed, are known only in the south-eastern quadrant, close to the Roman road linking Torwood and Crawford and the temporary camp at Durisdeer (46377). Of these settlements, Carse Knowes (46344), is one of the rectilinear enclosed settlements discussed in chapter 5. The only hillfort in the tile is Morton Mains Hill (46376), also in the south-east quadrant of the tile.

NT00 DUMFRIESSHIRE (FIG. 63)

The physical landscape of tile NT00 is characterised by mid to high elevations and steep slopes, with the exception of the south-eastern quadrant. Prehistoric monuments, mostly cairns and barrows, abound across the western half of the tile, and are located either along waterways or on high ground. Settlements, both open and enclosed, abound, but they are concentrated in the eastern quadrant of the tile, where several Roman features are located, including the military installations at

Milton (48383), Beattock (48407), and Coats Hill (48397). The most common settlement type is curvilinear enclosed, but settlements of all morphologies can be found in the tile, with the exception of monumental households. There are several hillforts: three clustered together in the south-east quadrant (Hell's Hole, 48425; Beattock Hill, 48414; Beattock Hill, 48396) with a fourth one slightly further away (Knock Hill, 48375), and a fifth one in the north-west quadrant (Middlegill, 48362).

NT20 – DUMFRIESSHIRE (FIG. 64)

Grid NT20 is characterized by several long, thin, river valleys, which converge on the basin of the White Esk. Prehistoric monuments are limited in number to a standing stone (Glendearg, 51108) and a group of cairns at John's Wood (51147, 51148, 51150), both of which follow the line of White Esk river. Settlements as well are limited in number and are only known in the southern quadrant of the tile. Among these, there is the rectilinear enclosed settlement at Fingland (51170). There are no monumental households, and the only known hillfort is Over Cassock (51169).

NX04 – WIGTOWNSHIRE (FIG. 65)

Tile NX04 covers the mid-lower portion of the westernmost promontory of modern Wigtownshire. Its landscape is hilly, more so in the northern half than in the southern one, and it is crossed by three short brooks which drain in opposing directions. A line of cairns, located along an imaginary semicircle which begins and ends on elevations close to the coastline, cuts the interior in half; other monuments include a cluster of stone circles, standing stones and cup marks in the north-east quadrant. There also is a possible Early Historic Christian funerary enclosure at Kirkmadrine (60441). Non-defended settlement sites are few and far between. Of particular note among them is the broch at Doon

Castle (60487, one of two within the sample. On the other hand, there are several promontory forts, often located in groups of two on the opposite sides of small bays. The only hillfort within the interior of the tile is on Barscarrow Hill (318950).

NX06 – WIGTOWNSHIRE (FIG. 66)

Tile NX06 is mostly characterised by varying elevations, with steeper slopes on the north-eastern quadrant and a small coastal plain in the south-eastern one. Prehistoric monuments are represented primarily by cairns, which are located in the interior, in a loose horse-shoe shape which fits the outline of the bay from a distance. There is a cluster of open settlements on higher grounds in the north-east quadrant, and several curvilinear enclosed settlements and enclosures on lower elevations all along the coastline of the eastern quadrants. There are two substantial households: a broch in the south-east quadrant (Teroy, 60815), and a dun in the north-west one (Craigoch, 60744). Beyond the settlement cluster, the presence of two souterrains (Cairn Connel Hill, 81599; Aird Moss, 279982) suggests that the settlement pattern may well be incomplete. There also are three hillforts, clustered in the south-west quadrant (Tor of Craigoch, 60830; Kemp's Grave, 60845; Mid Dinduff, 81571). The archaeological landscape is completed by two Early Historic Christian cemeteries in the southern quadrants (Aird Cottage, 82357; Challoch, 81596).

NX08 – AYRSHIRE (FIG. 67)

Tile NX08 encompasses a sliver of mainland South-West Scotland coastline, looking west towards Ireland. Prehistoric monuments are scarce, with a cup marks site in the northern half and a standing stone and stone circle clustered together in the southern half, close to the confluence between the river Stinchar

and one of its smaller tributaries. The same area also houses several inhumation burial grounds, at least one of which may be Christian (Holm Park, 60957). A few settlements have been found throughout the southern half of the tile, with a small group of open settlements and souterrains located in the confluence area mentioned above. There is a single known hillfort, in the northern half of the tile (Coarsedays, 60933), looking out toward the sea.

NX26 – WIGTOWNSHIRE (FIG. 68)

The landscape of tile NX26 is largely hilly, with several rivers, including Tarf Water, and three lakes. Cairns and barrows represent the totality of the prehistoric monuments, and they are located on top of hills or along riverways. The western quadrants house almost all known settlements, which are predominantly open. Monumental households are represented by the crannog at Loch Heron (62396). The tile house a single hillfort (Bennan of Garvilland, 62426), located on high ground in the south-west quadrant. The archaeological landscape is completed by a stretch of Roman road, linking Glenlochar to Loch Ryan.

NX28 – AYRSHIRE (FIG. 69)

Tile NX28 is characterised by a high elevation plateau, cut through by a thin river valley faced on both sides by steep slopes. Cairns and barrows abound and are mostly located along waterways or on high ground. There also are two stone monuments in the northern quadrants of the tile. The remainder of the archaeological landscape is limited to a single curvilinear enclosed settlement (Knochmalloch, 62549) in the south-west quadrant.

NX34 – WIGTOWNSHIRE (FIG. 70)

The landscape of NX34 is characterised by gently rolling hills, with several minor rivers draining west into the sea.

Prehistoric monuments abound, with several cairns in the north-west quadrant, and a cluster of cup marks in the south-east quadrant. Several standing stones monuments are also located in riverine areas. There are several settlement sites, which are mostly located on higher ground but overlooking the coastline. Substantial households are represented by two crannogs in the north-west quadrant (Elrig Loch, 62709; Rough Loch, 62707). The archaeological landscape is completed by two hillforts in the southern half of the tile, Fell of Barhullion (62757) and the promontory fort at Barsalloch Point (62816).

NX43 – WIGTOWNSHIRE (FIG. 71)

The landscape of tile NX43 is hilly, with steep cliffs facing the sea along the western and southern sides. There are only two minor river basins, both of which drain to the east, so that there is no running water in the western half of the tile: a factor which might explain the dearth of sites in the interior of the western quadrants of the tile. Prehistoric monuments are limited to a small number of cup markings and a standing stone in the northern quadrants. In the Early Historic, two crosses were erected in the tile, one on the western coastline (St. Ninian's Cave, 63133) and one dedicated to St. Peter (63128) along the road leading to the *monasterium* at Whithorn (63298), just north of the tile's border. Non-defended settlements are limited in number to just four sites, one of which is the rectilinear enclosed settlement of Rispain Camp (63122) in the north-west quadrant. Hillforts, on the other hand, abound: the eastern and southern coastline are brimming with promontory forts, some in relative isolation, and some coupled together on opposite sides of the same bay. Of these, mention should be given to the fort on the Isle of Whithorn (63098), which guarded the sea-bound approach to the *monasterium*.

NX46 – WIGTOWNSHIRE AND

KIRKCUDBRIGHTSHIRE (FIG. 72)

Tile NX46 is divided in two by a long thin fjord-like strip of sea which wounds up the south-west quadrant of the tile. To the east of the fjord, the landscape is characterised by high, steep-sloped elevations; to the west, there are lower, gentler hills. Three main river basins (the river Cree, the Penkiln Burn and the Palnure Burn) drain into the fjord from all directions. The archaeological landscape is mostly limited to prehistoric monuments, of which cairns are the most abundant type, with a cluster just north to the beginning of the fjord, and a few more examples in the south-east and south-west quadrants. Settlements are not represented in the tile, although there are several enclosures and a hillfort (Parliament Knowe, 63516) just north of the fjord area and an Early Historic Christian burial ground (Minnigaff, 296972). The Roman road linking Glenlochar to Loch Ryan runs through the tile, parallel to the fjord outline.

NX64 – KIRKCUDBRIGHTSHIRE (FIG. 73)

Tile NX64 is divided into two promontory areas, representing roughly the eastern and western quadrants of the tile. Elevations changes are mostly slow, with the exception of the slopes facing the bay between the two promontories. Prehistoric monuments are almost completely limited to cup markings, which are exceedingly common on both promontories. Settlement evidence is limited and skewed towards the western quadrants of the tile. There are also several hillforts, three of which located close to the coastline (Doon Wood, 63892; Borness Batteries, 63990; King William's Battery, 63983) and one on high ground in the north-east quadrant (Drummore Castle, 63925). There is some additional evidence of human occupation presented by some enclosures and a group of shell middens

(Brighthouse Bay, 84040) on the coastline of the eastern promontory.

NX66 – KIRKCUDBRIGHTSHIRE (FIG. 74)

The physical landscape of tile NX66 is characterised by varying elevations and an abundance of running water, be it lakes or rivers. The main hydrological basin is that of the Black Water of Dee. Prehistoric monuments are limited to the southern quadrants, and include a few examples of cup markings and several cairns and barrows. The same quadrant houses a number of open settlements. Despite the abundance of lakes, there are no recorded crannogs in the Canmore record. Substantial households are represented instead by a single dun in the north-east quadrant (Craig Hill, 64169). The archaeological landscape is completed by two hillforts in the south-east quadrant (Edgarton Mote, 64185; Giant's Dyke, 64189).

NX85 – KIRKCUDBRIGHTSHIRE (FIG. 75)

The interior of tile NX85 is characterised by medium elevations with rapid changes in elevation, with the exception of hydrological plains and basins, the main one of the latter being that of the Urr Water. Prehistoric monuments are few in number, with a cup marks outcrop in the south-west quadrant and three cairns overlooking the delta of a minor river in the south-east one. Settlements are few in number, and mostly located in coastal areas and relatively lower elevations. Of these, mention should go to the rectilinear enclosed settlement at Port o Warren (64894) and to the crannog in Borean Loch (64867). There are several hillforts, the most important of which is the Early Historic Mote of Mark (64911), located on a knoll in the south-west quadrant of the tile.

NX86 – KIRKCUDBRIGHTSHIRE (FIG. 76)

The physical landscape of tile NX86 is characterised by varying elevations, cut through by the basin of Urr Water and its tributaries. Prehistoric monuments are scarce, with cairns being the main such site within the tile. Settlements are few in number as well, and they are located both on lower and higher elevations. The western quadrant has preserved the remains of two hillforts, clustered relatively close to each other on opposite banks of the Urr Water (Waterside, 64691; Camp Hill, 64960). Another hillfort (Torkirra, 64975) is located in the south-east quadrant, whilst a fourth one (Barr Hill, 64944) is located in the north-west quadrant. The archaeological landscape is completed by the Roman road linking Dalswinton and Glen Lochar.

NX88 – KIRKCUDBRIGHTSHIRE AND DUMFRIESSHIRE (FIG. 77)

Tile NX88 is characterized by varying elevations, with rapid changes in altitude, cut through by the basins of the Cairn Water and of the River Nith. The north-west quadrant contains the near totality of the archaeological landscape: prehistoric monuments are mostly represented by cairns, all of which flank brooks, as do several of the open and curvilinear enclosed settlements present. This quadrant also houses a hillfort (Sundaywell, 65134). The remainder of the archaeological evidence comes from the easternmost strip of the tile, with three more settlements, one of which is a rectilinear enclosed one (Low Kirkbridge, 90959), and two additional hillforts (Dinning, 65061; Springfield Hill, 65116).

NY06 – DUMFRIESSHIRE (FIG. 78)

The physical landscape of the tile is split: the north-east quadrant is characterised by a slowly rising plain; the north-west quadrant is characterised by a low knoll. Both quadrants are cut through by the Lochar Water and its tributaries. All

prehistoric monument types considered in the research projects are absent. The settlements present are few in numbers and are all concentrated along the slopes of the knoll. Beyond settlements, there are also three hillforts (Craig Wood, 66075; Comlongon, 66070; Ward Law, 66099). Of these, Ward Law (66099) was abandoned before the Roman Iron Age, and repurposed as a signal station to support the temporary camp (Ward Law, 66098) and the Roman forts (Lantonside, 66089 and 66090) located in its proximity (Jones 2011, 316–317).

NY08 – DUMFRIESSHIRE (FIG. 79)

The physical landscape of tile NY08 is mostly characterised by low elevations with gentle slopes, with the exception of the south-west quadrant, where there are two knolls. It is rich in running water, with the river Annan, the Kinnel Water and Water of Ae crossing the tile and feeding four lakes. None of the prehistoric monuments looked for are present. Settlements, both open and enclosed, are few in number and present both on lower and higher elevations. Substantial households are represented by two crannogs located within Castle Loch (89712 and 66316). A total of five hillforts is also present (Barr's Hill, 66328; Pinnade Hill, 66339; Archwood Hill, 66231; Woodycastle, 66277; White Hill, 66340). The archaeological record is completed by several Roman features, chief of which is the military installation at Murder Loch (66263).

NY17 – DUMFRIESSHIRE (FIG. 80)

The physical landscape of tile NY17 is characterised by low elevations, with the exception of the north-east quadrant which is dominated by a higher knoll. The river Annan and the Water of Milk cut through the hills creating long, thin fluvial plains. Prehistoric monuments are rare but present, with several cairns and a standing stone. The majority of settlements are curvilinear enclosed ones

situated in riverine locations, though there are open and miscellaneous settlements as well. One of the latter (Burnswark, 85702) is located on what was previously a hillfort and is flanked by Roman temporary camps (72884), superimposed by a possible later fortlet (72884). The prehistoric landscape is completed by four hillforts in the southern quadrants (Dalton, 66735; Braehill, 66743; Woodcock Air, 66715; Buckiebank Plantation, 66708). In the Early Historic period, the monastic centre of Hoddom (69504) was founded in the south-east quadrant of the tile.

NY26 – DUMFRIESSHIRE (FIG. 81)

Tile NY26 is characterised by a coastal plain on both sides of the isthmus, with some low elevations in the north-west quadrant. Native sites are exclusively present in the northern quadrants, with prehistoric monuments represented by cairns, a cluster of which is located in the north-east quadrant. Settlement evidence is relatively rich, with eight settlements, five of which are rectilinear enclosed ones, in the northern quadrants. There also is an unusually large enclosure or hillfort (Dornock Mains, 67014) located a short distance from the coastline in the north-west quadrant. The archaeological landscape of the Scottish quadrants is completed by a stretch of Roman road, suspected to link Hadrian's Wall with Inveresk.

The southern tiles are instead characterised by the western end of Hadrian's Wall and by the beginning of the coastal defence system which protected the Britannia province. The key site within these defences is the fort of Maia in the south-west quadrant, which also came to house a vicus (RCR-NMR_NATINV-10123).

NY28 – DUMFRIESSHIRE (FIG. 82)

Tile NY28 is characterised by rapidly changing elevations, interrupted by the

deep-seated bed of the Water of Milk and its tributaries, and of the Kirtle Water. Prehistoric monuments are plentiful, with the most common category being cairns. Settlements abound as well, and they are found both on riverine locations and on higher grounds. There also are four hillforts, all in the western quadrants of the tile (Carterton, 67166; Cleuch-heads, 97158; Newland Hill, 67181; Crawthat Cottage, 67227).

NY29 – DUMFRIESSHIRE (FIG. 83)

The physical landscape of tile NY29 is characterised by medium and high elevations, with steep changes in elevations caused by the fast flowing waters of the Black and White Esk, which join in the south-eastern quadrant of the tile into the Esk. Prehistoric monuments tend to be located mostly along the White Esk in the northern quadrants, whilst settlements abound, though they are clustered almost exclusively along the river basin. The most common settlement type is curvilinear enclosed, though there are several rectilinear enclosed settlements as well. There also are four hillforts (Camp Hill, 67373; Billholm, 67315; Bessie's Hill, 67235; Castle O'er 67376), again either located in riverine locations or within view of the Esk. The archaeological landscape is completed by the Roman military installation at Raeburnfoot (67274) and the road joining it to Torwood and Newstead.

NY47 – CUMBRIA (FIG. 84)

This tile is characterised by low hills, crossed through by the Liddel Water and the Lyne river. It is devoid of archaeological sites, with only two cairns, an enclosure, and a rectilinear enclosed settlement (Park House, 67846), all of which are located in the north-west quadrant of the tile.

NY48 – DUMFRIESSHIRE AND CUMBRIA (FIG. 85)

The physical landscape of the tile is characterised by slowly rising elevations cut through by the Liddel Water, with the exception of the steeper slopes in the north-west quadrant, which have been shaped by the Tarras Water. Prehistoric monuments are concentrated mostly in the south-west quadrant, which houses several cairns and standing stones. Settlement evidence is limited to three settlements, two rectilinear enclosed ones and a curvilinear enclosed one, in the north-east quadrant, which also houses the only hillfort of the tile (Kirk Hill, 67858). The archaeological landscape is completed by an Early Historic Christian burial ground in the south-east quadrant of the tile (Longrow, 166464) and by an Early Historic inscribed cross in the north-east quadrant (Liddesdale, 67862). In modern regional terms, it may be noted that the south-east quadrant of the tile falls within England. The ADS (<http://archaeologydataservice.ac.uk>) does not have any sites of interest to the thesis in its records. The local Historic Environment Record has not been assessed.

NY57 – CUMBRIA (FIG. 86)

Tile NY57 is also characterised by low hills, crossed by the Black and White Lynes, with a plateau in the south-east quadrant which is crossed by Hadrian's Wall and its accompanying road. Ahead of the Wall, there is the fort of Bewcastle (RCR-NMR_NATINV-13013), with a possible Roman fourth century building to the north (RCR-NMR_NATINV-875565). As this was a military zone, settlements are lacking, with a single hut circle, probably earlier than the study period, found near to the Wall line (RCR-NMR_NATINV-12980). Prehistoric monuments are more common, with both cairns and a cup marked stone present.

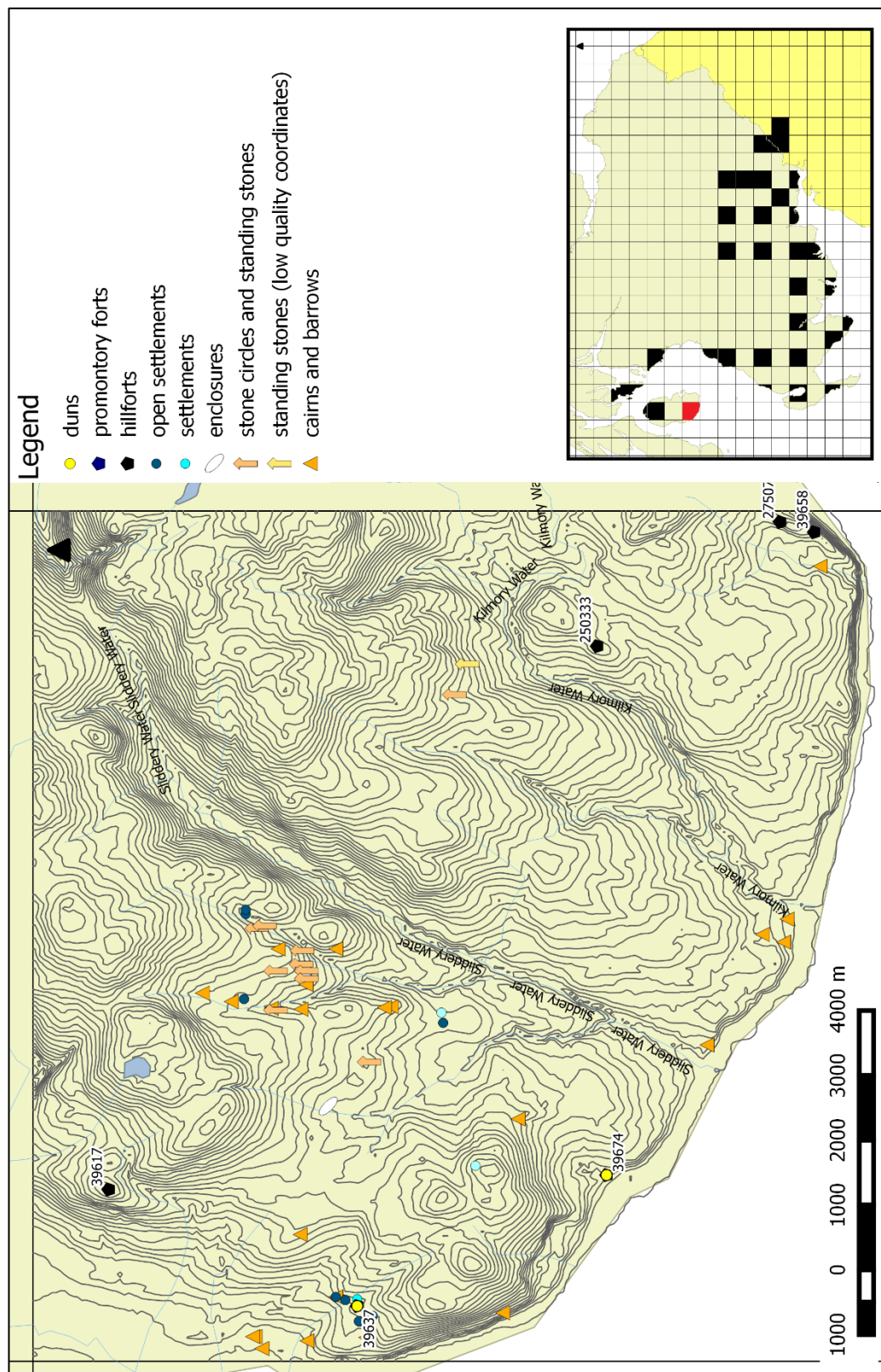


FIGURE 55: NR92 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

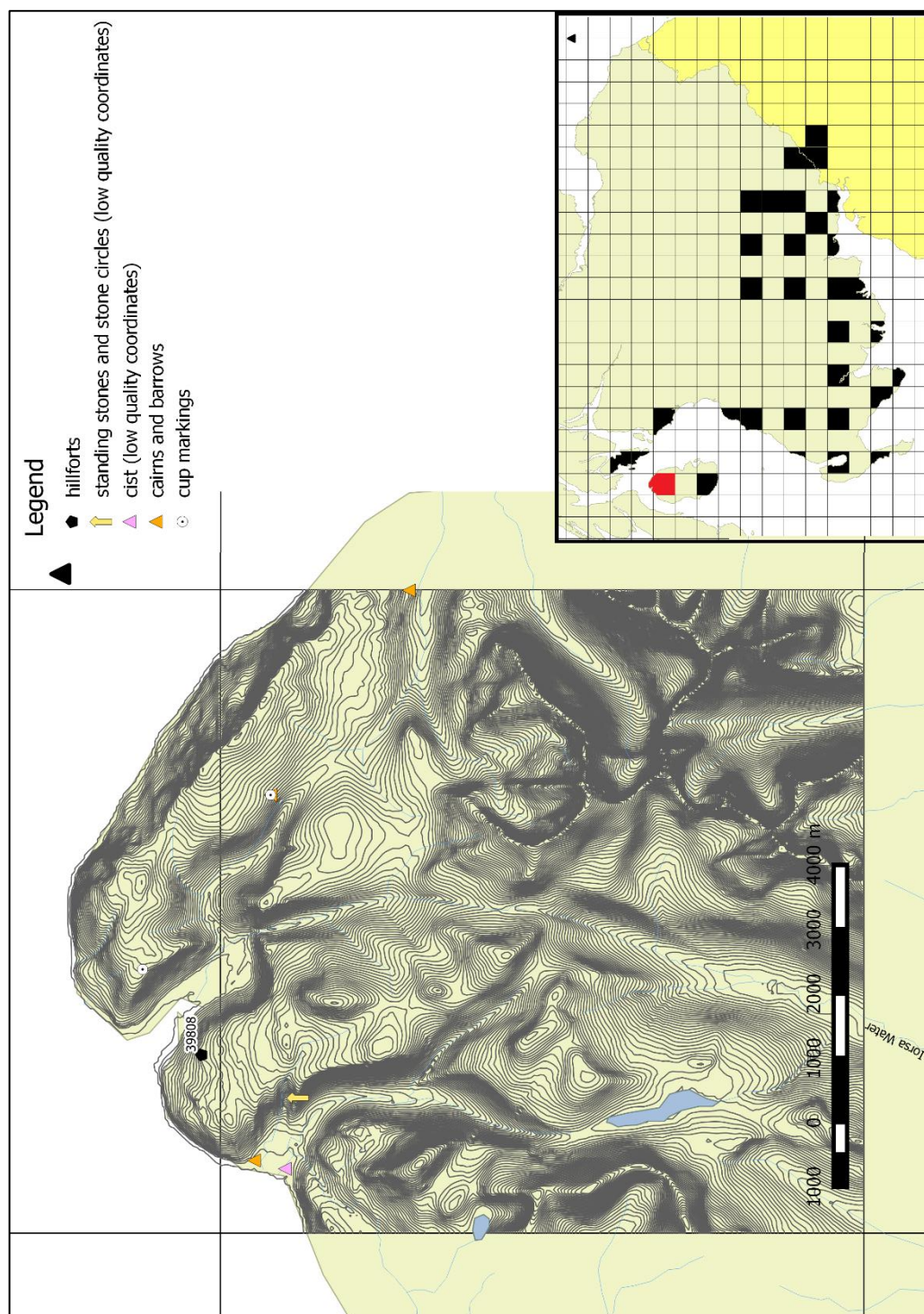


FIGURE 56: TILES NR94/95 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

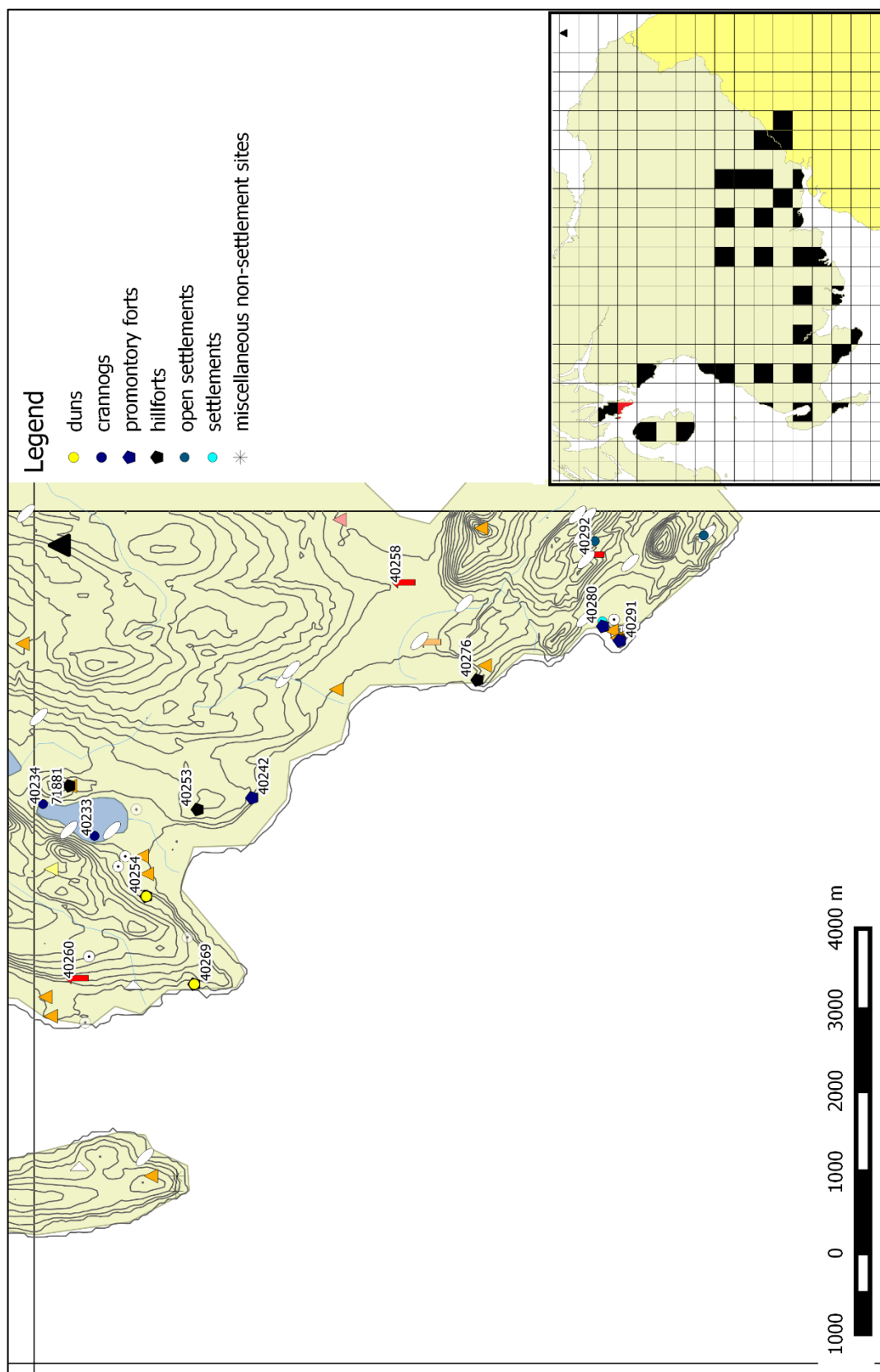


FIGURE 57: TILE NS05 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

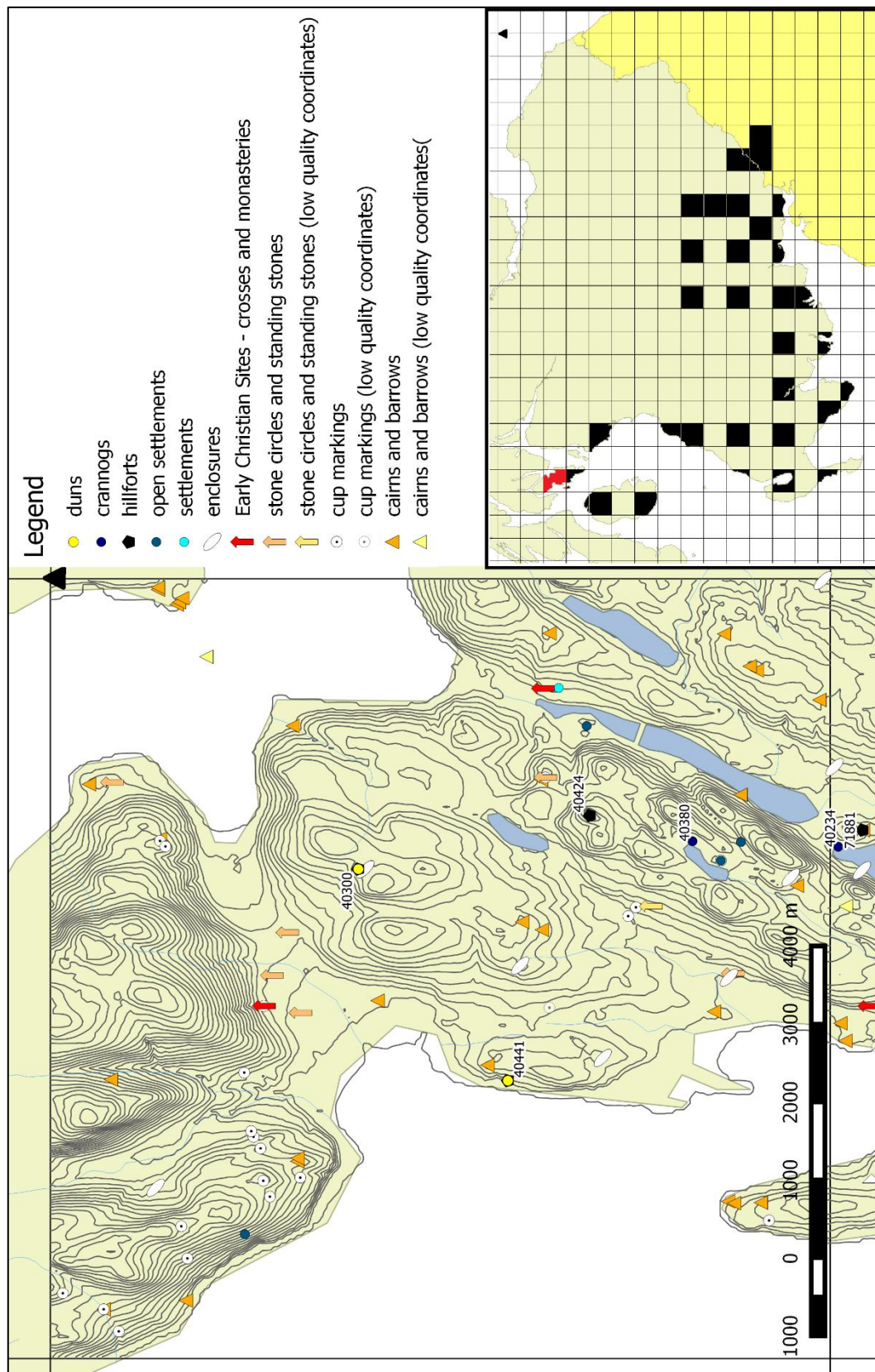


FIGURE 58: TILE NS06 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017, ORDNANCE SURVEY (DIGIMAP LICENSE))

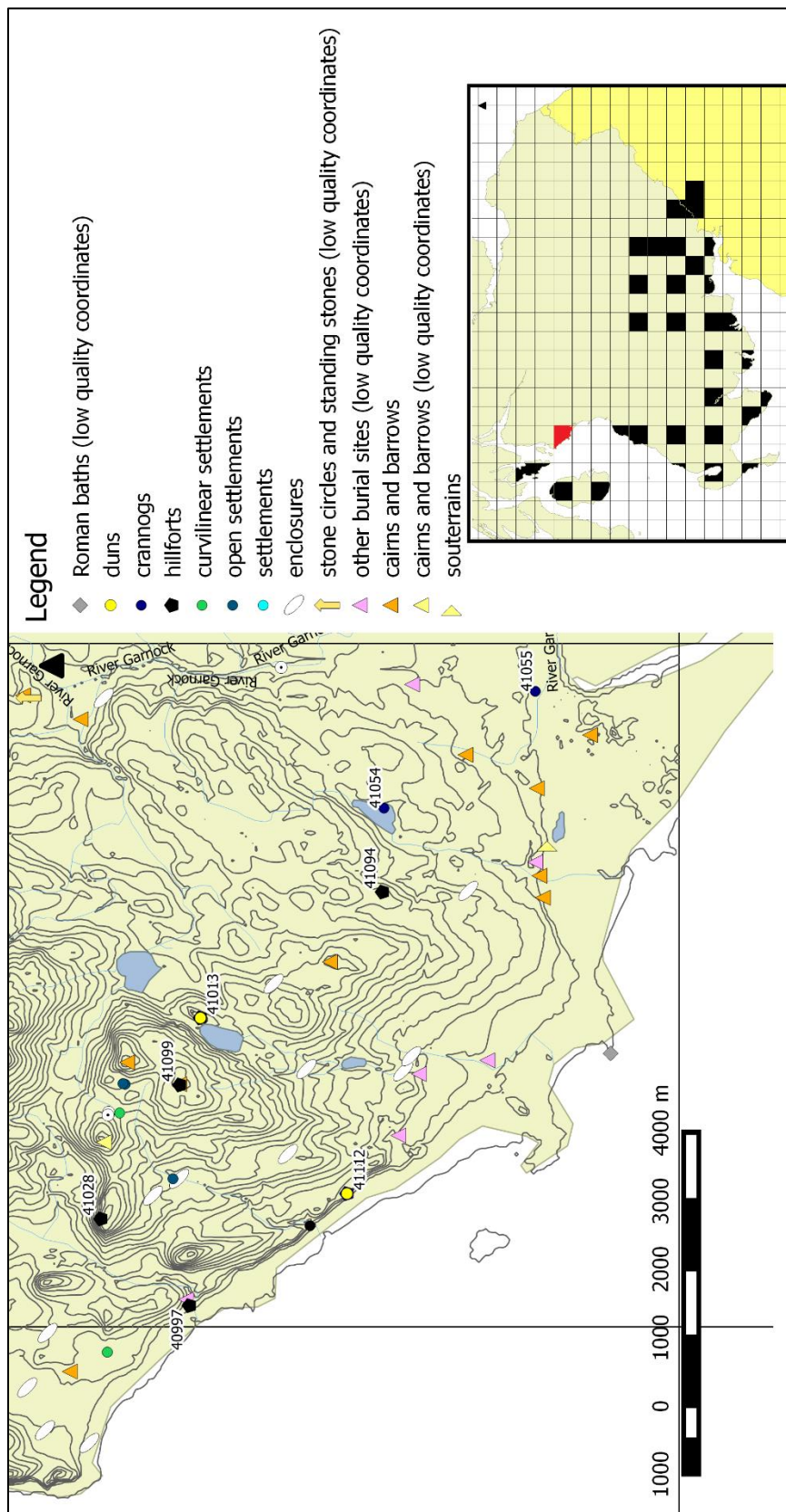


FIGURE 59: TILES NS14/24 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

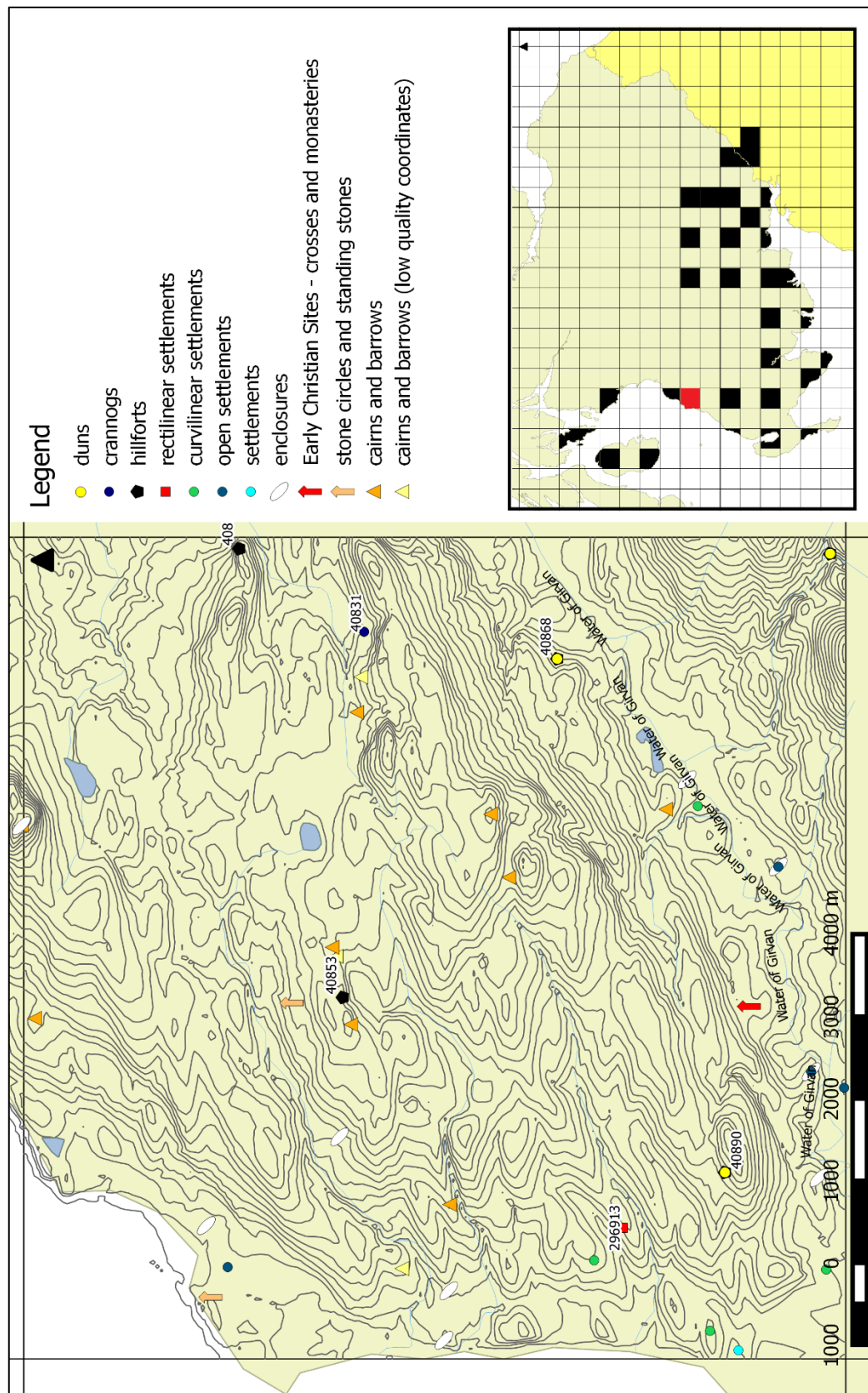


FIGURE 60: TILE NS20 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017, ORDNANCE SURVEY (DIGIMAP LICENSE))

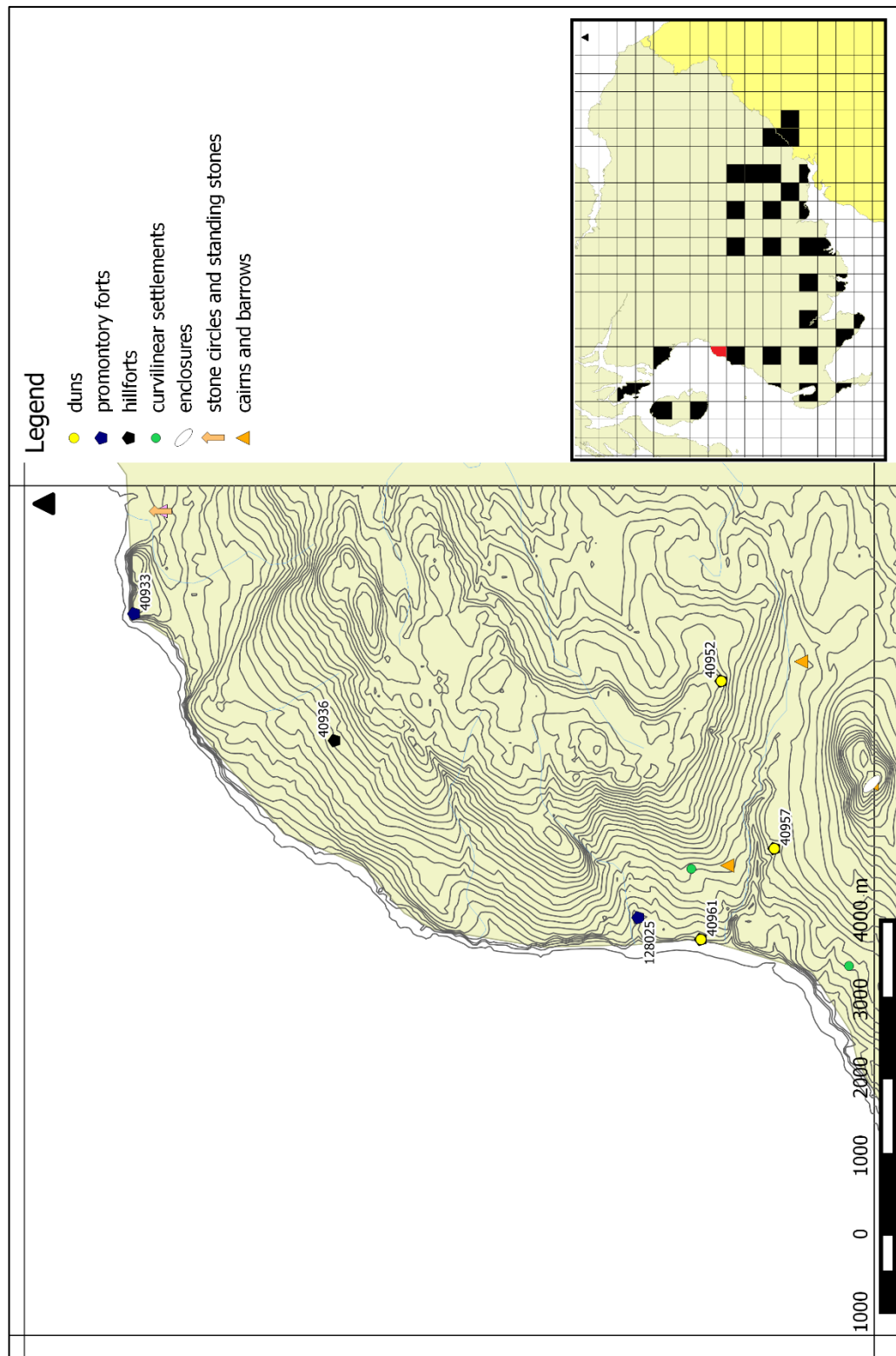


FIGURE 61: 'TILE NS21 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

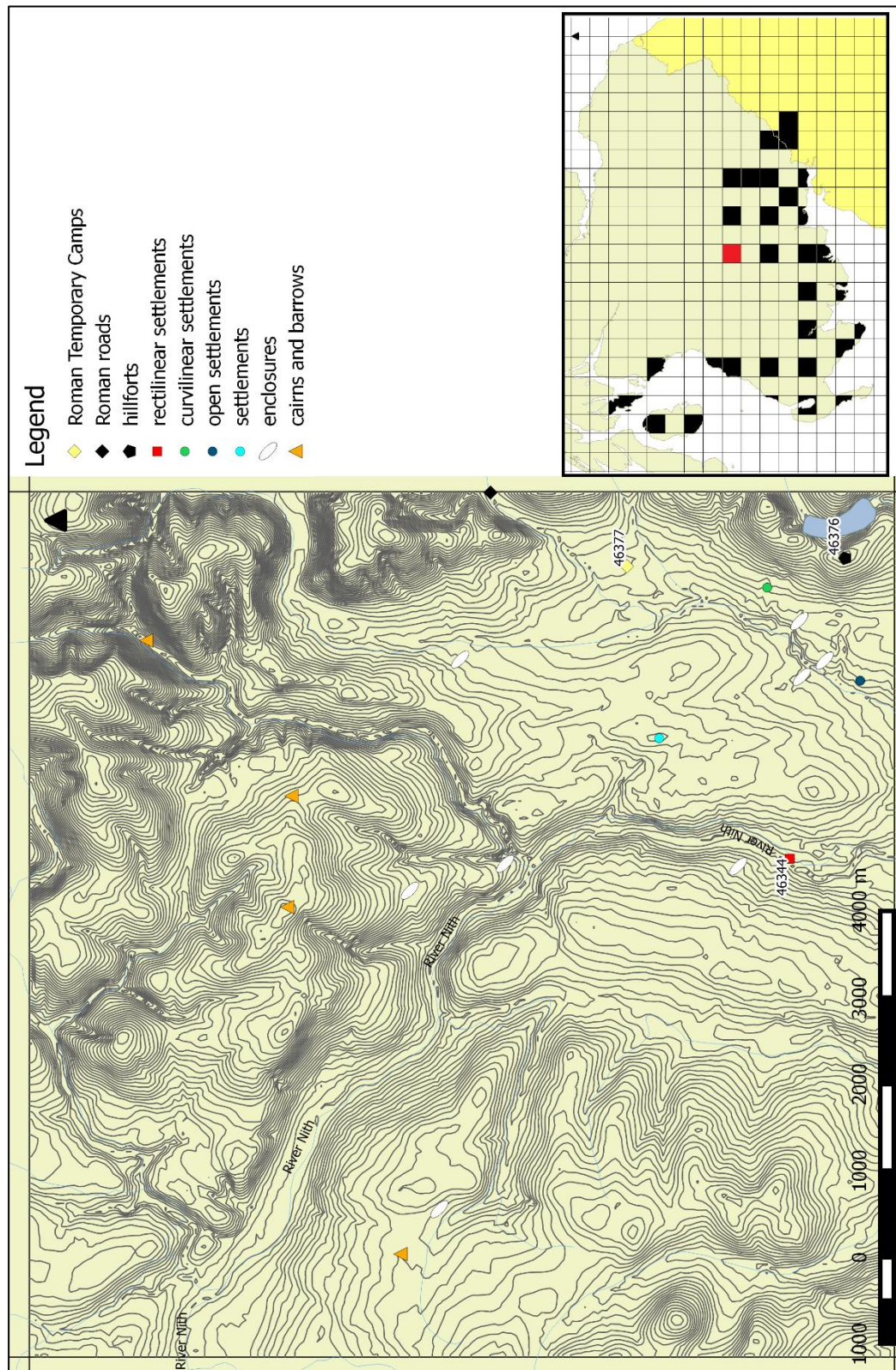


FIGURE 62: TILE NS80 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017, ORDNANCE SURVEY (DIGIMAP LICENSE))

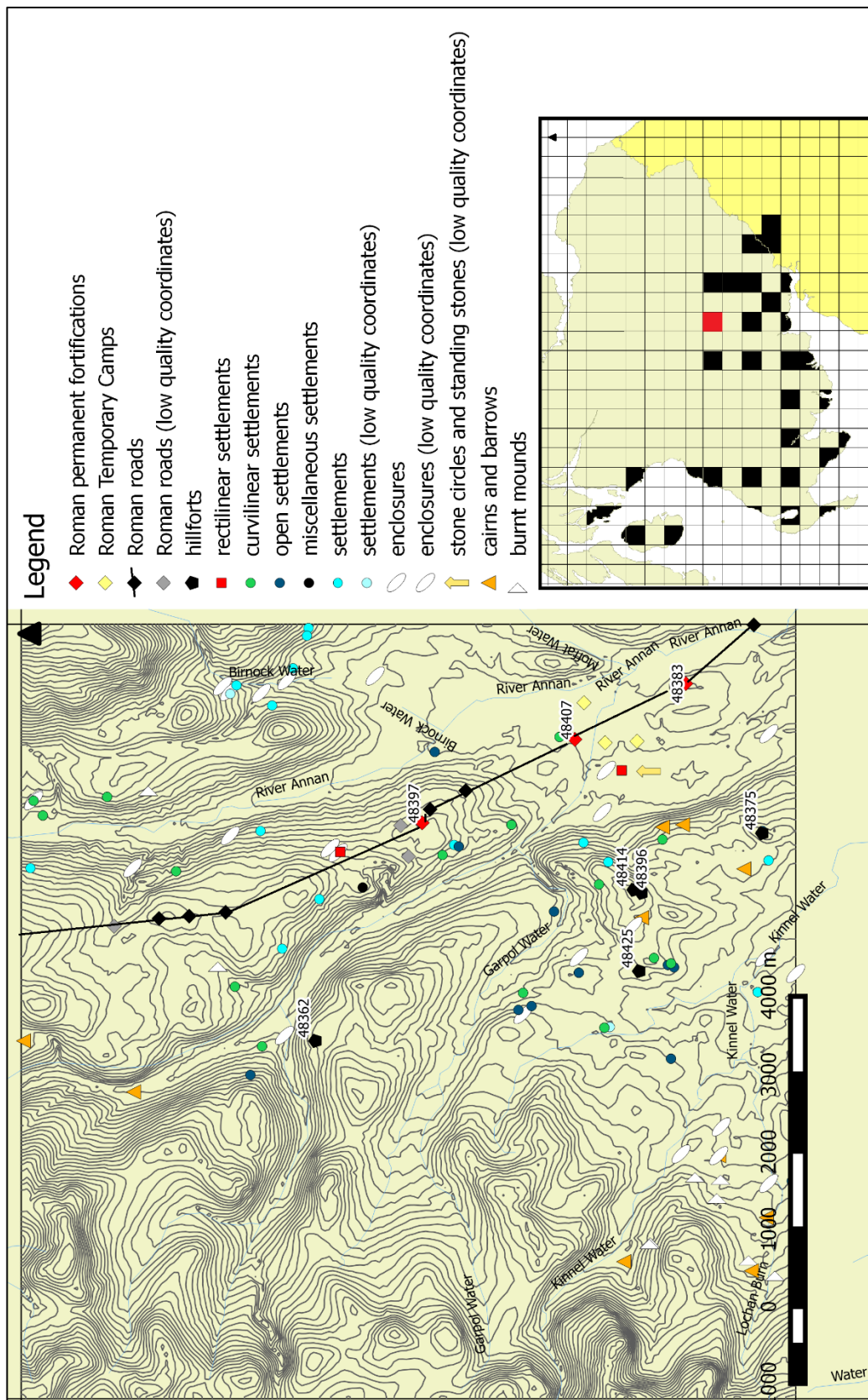


FIGURE 63: TILE NT00 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

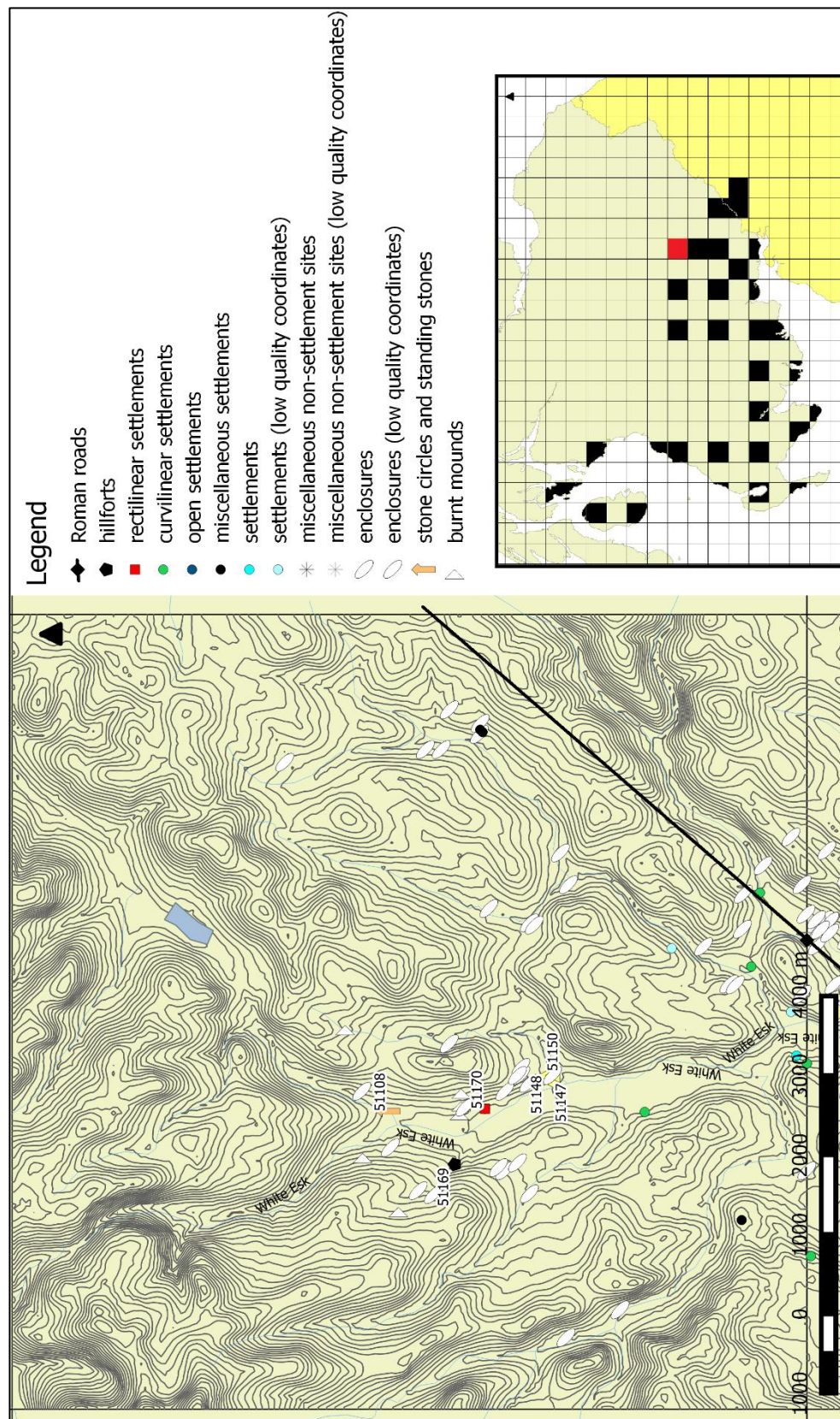


FIGURE 64: TILE NT20 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

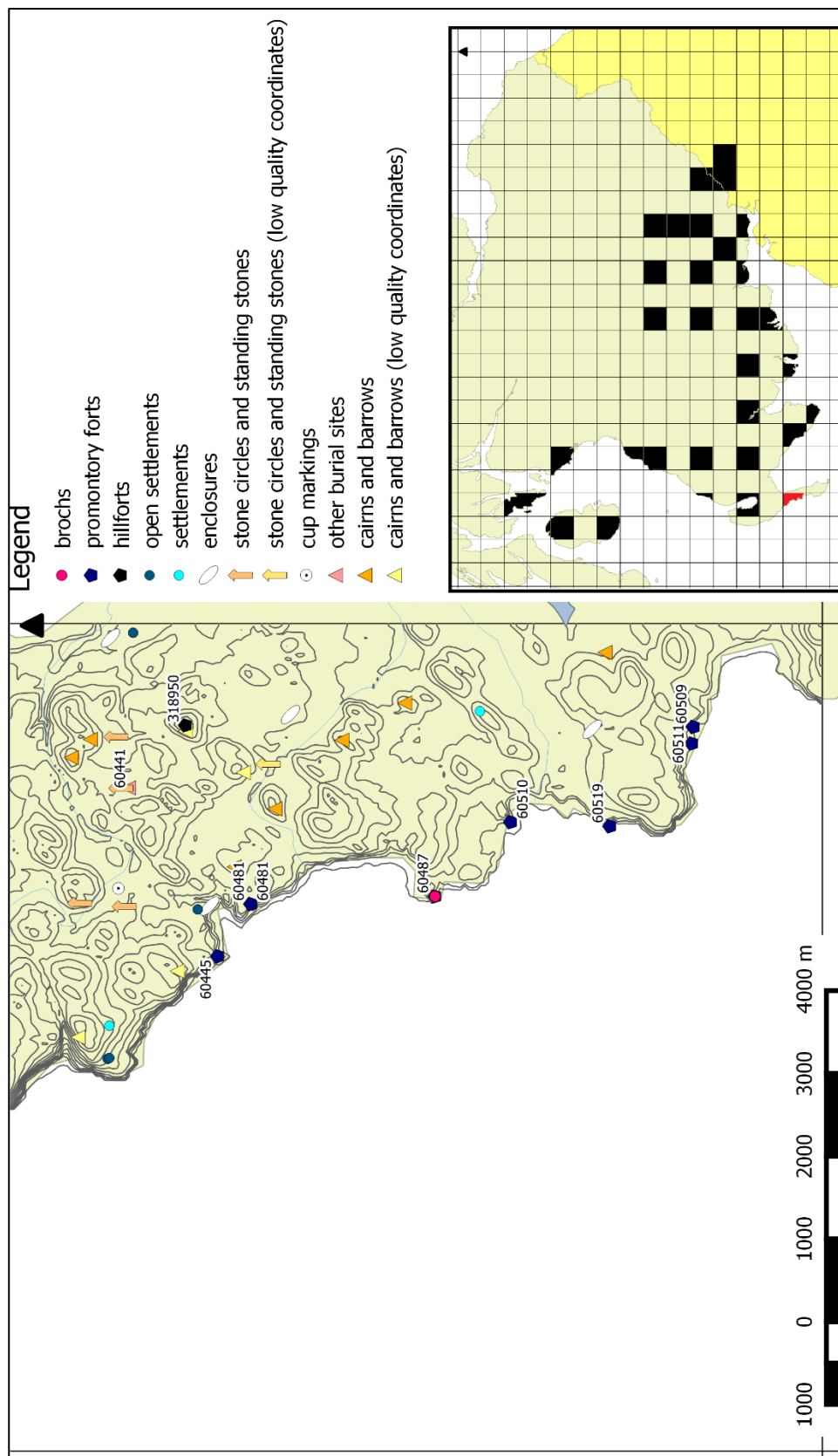


FIGURE 65: TILE NX04 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

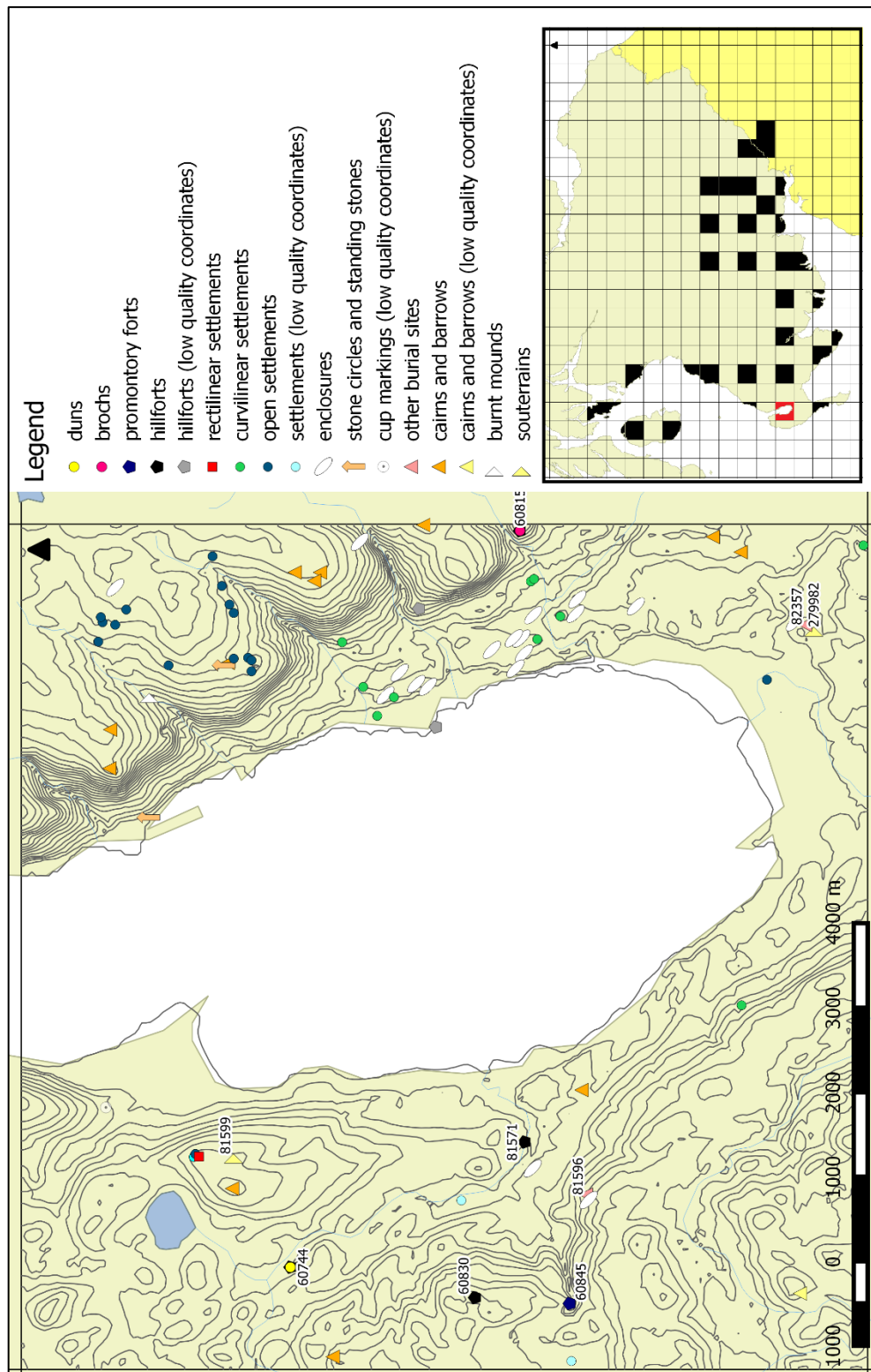


FIGURE 66: TILE NX06 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

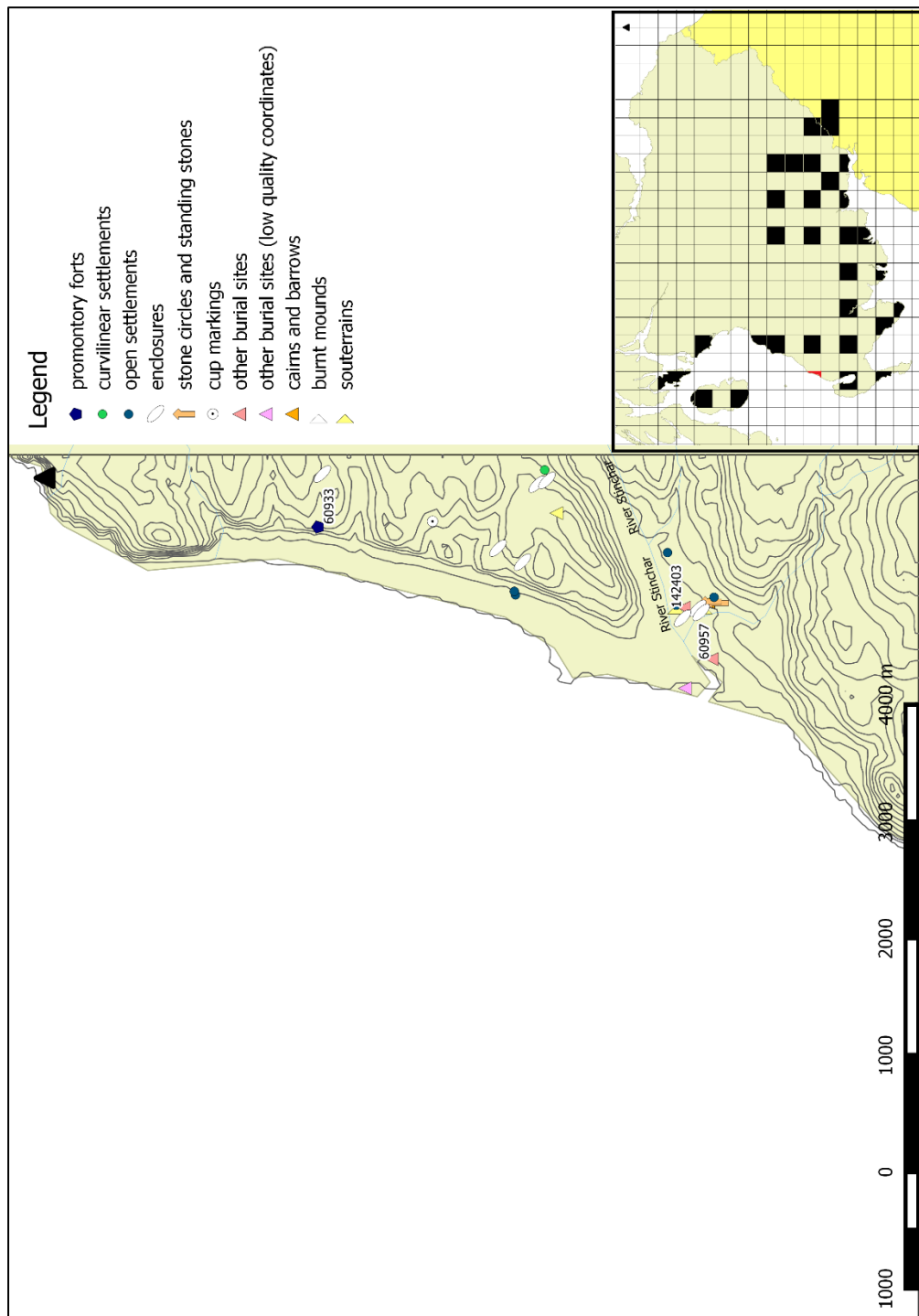


FIGURE 67: TILE NX08 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

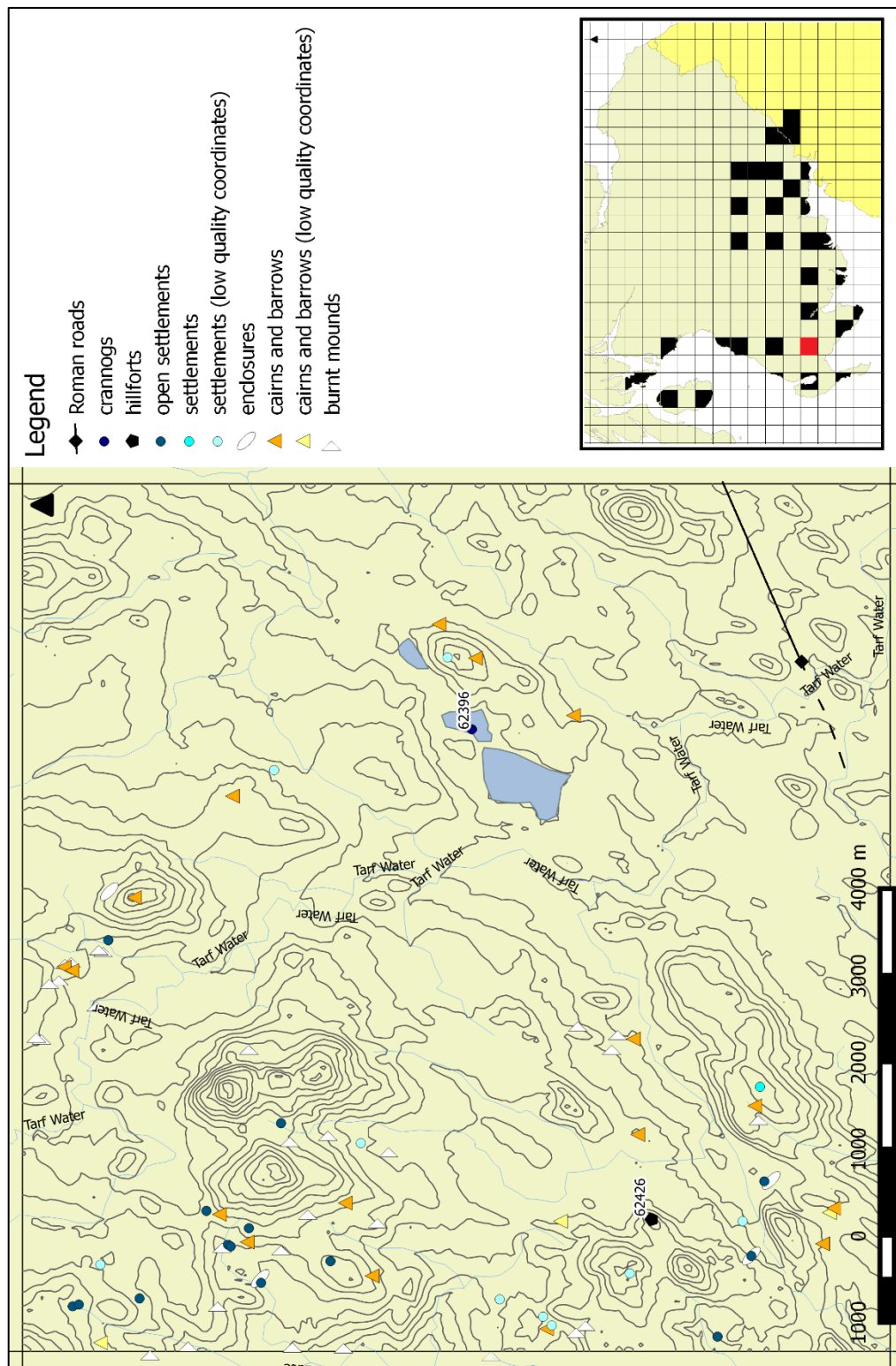


FIGURE 68: TILE NX26 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

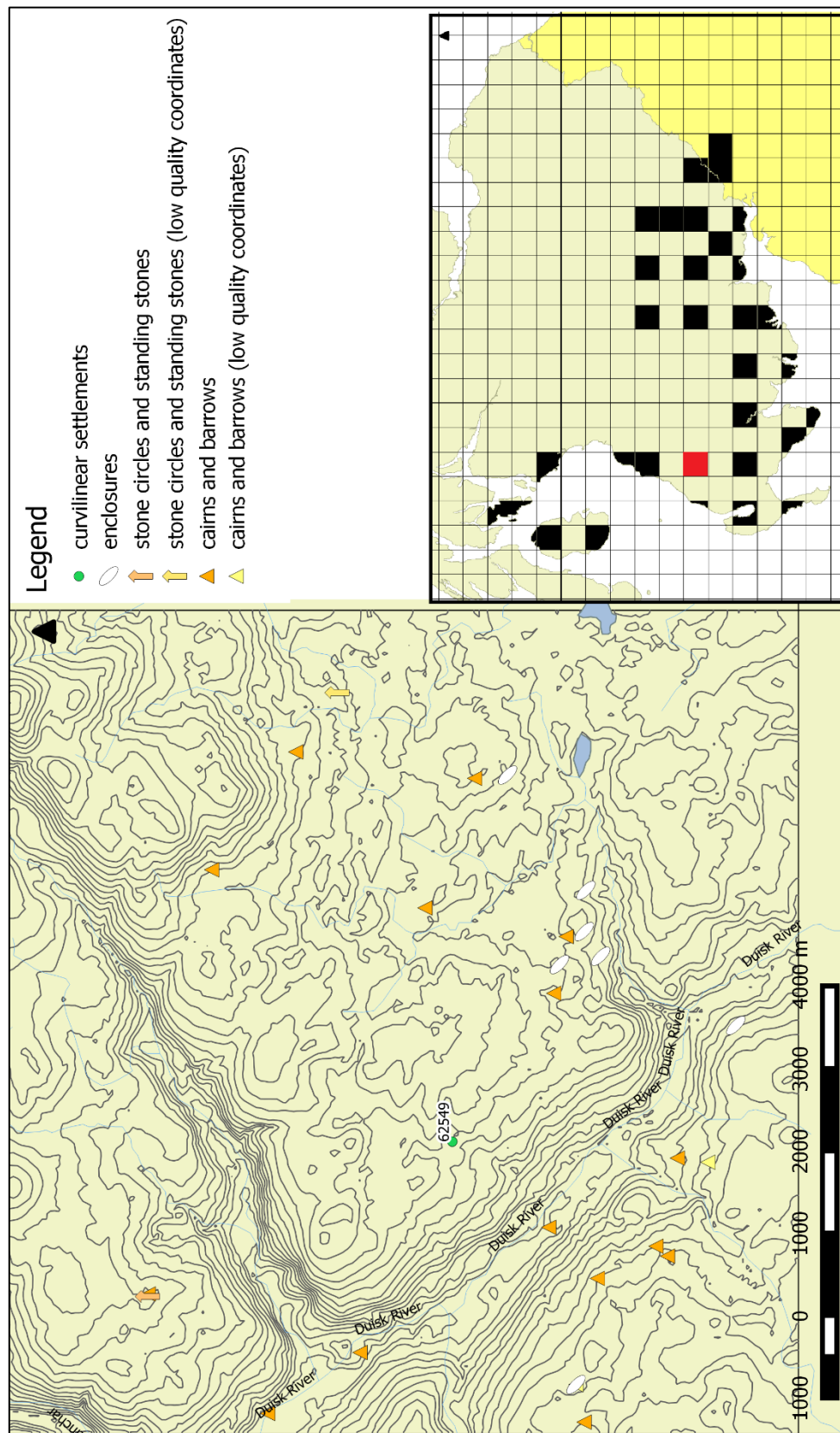


FIGURE 69: TILE NX28 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

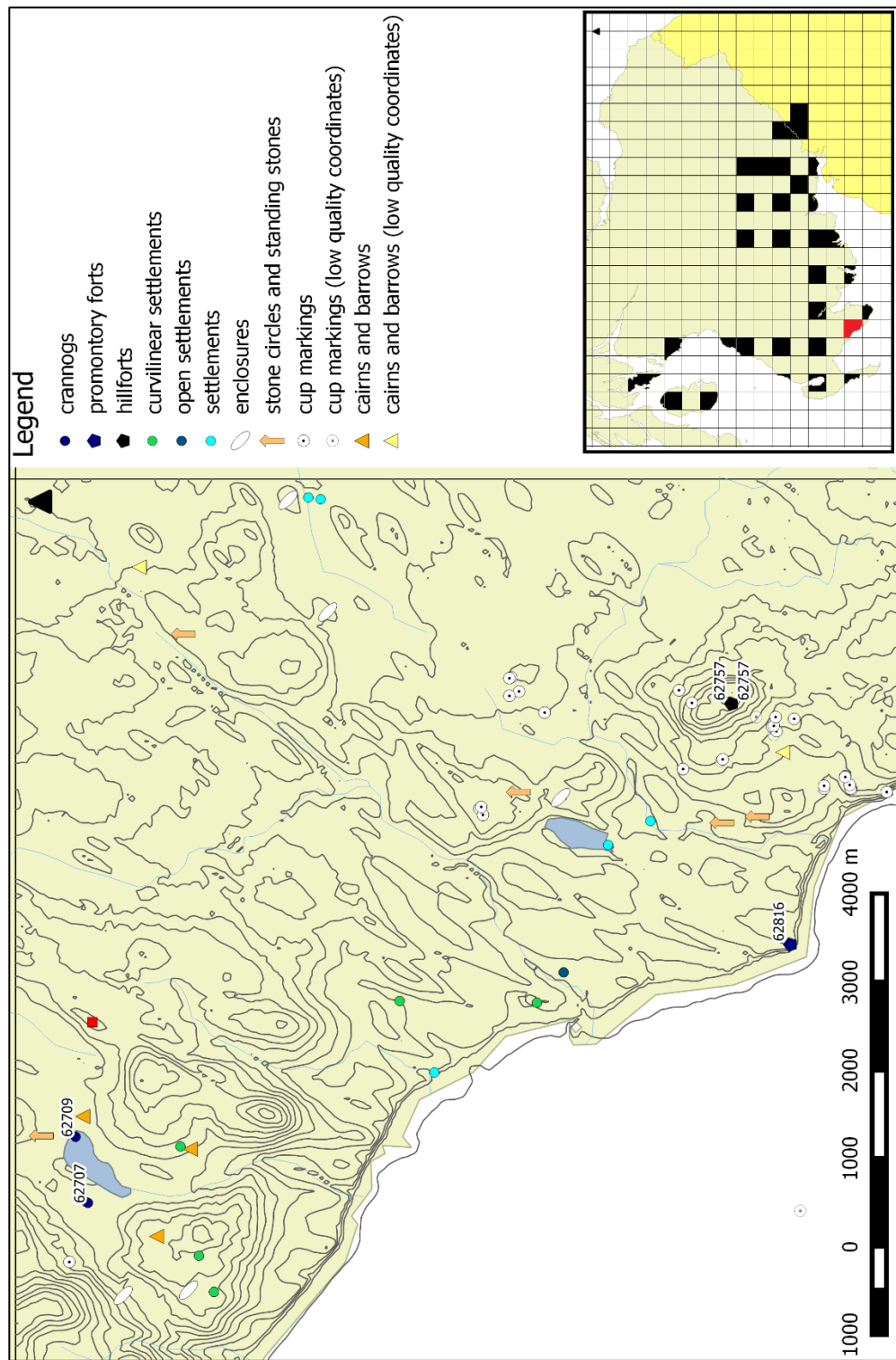


FIGURE 70: TILE NX34 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

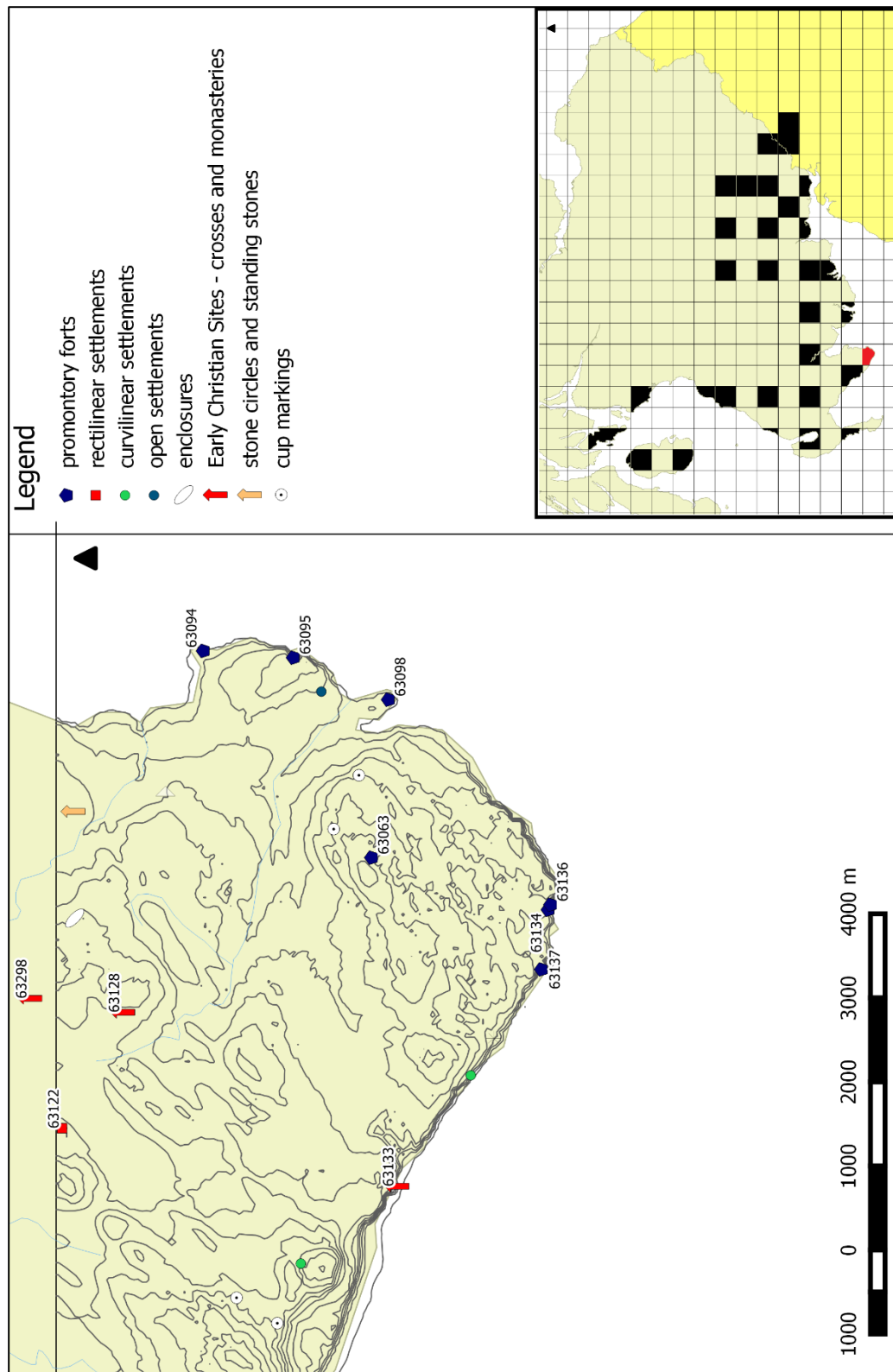


FIGURE 71: TILE NX43 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

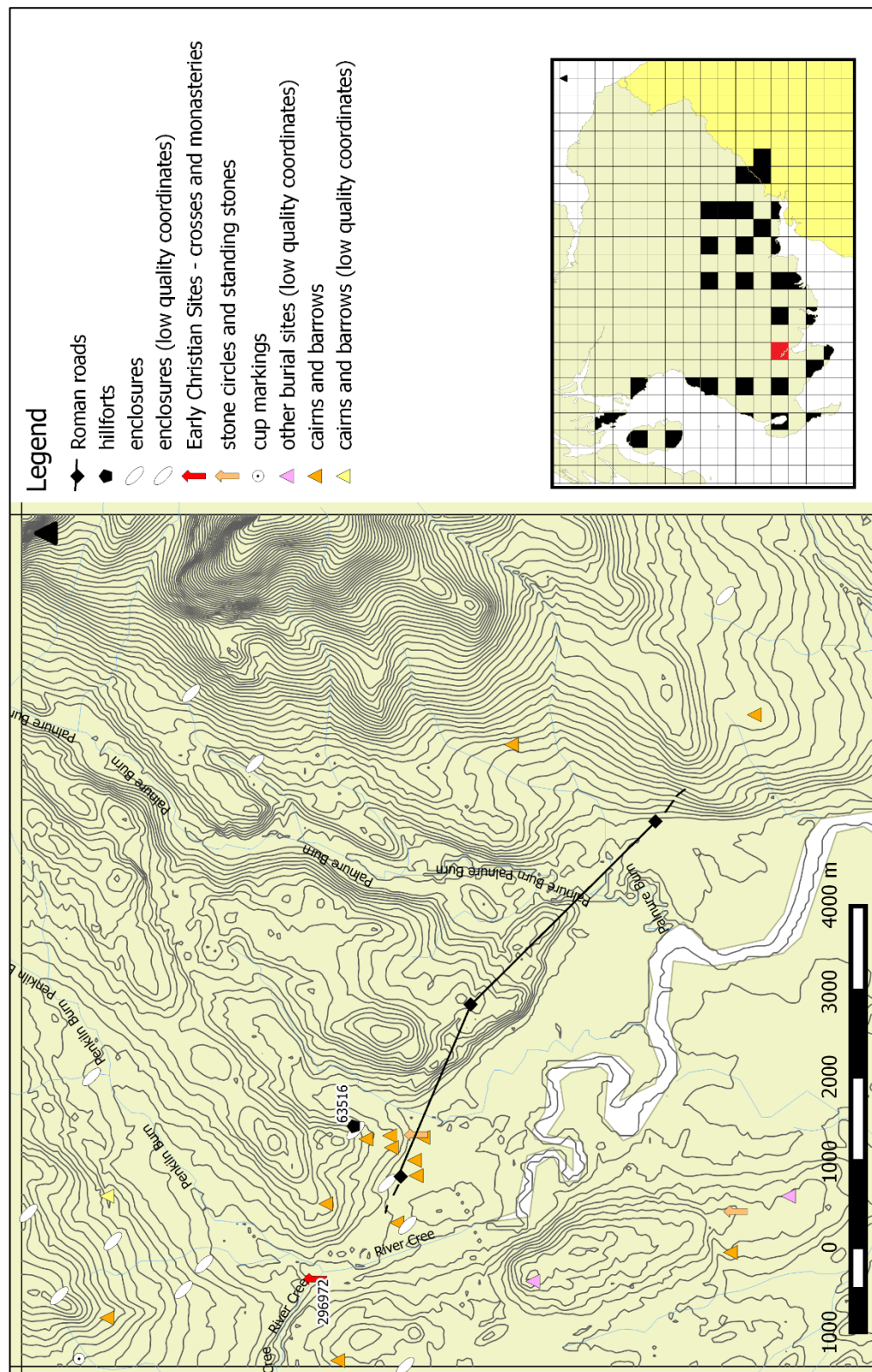


FIGURE 72: TILE NX46 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

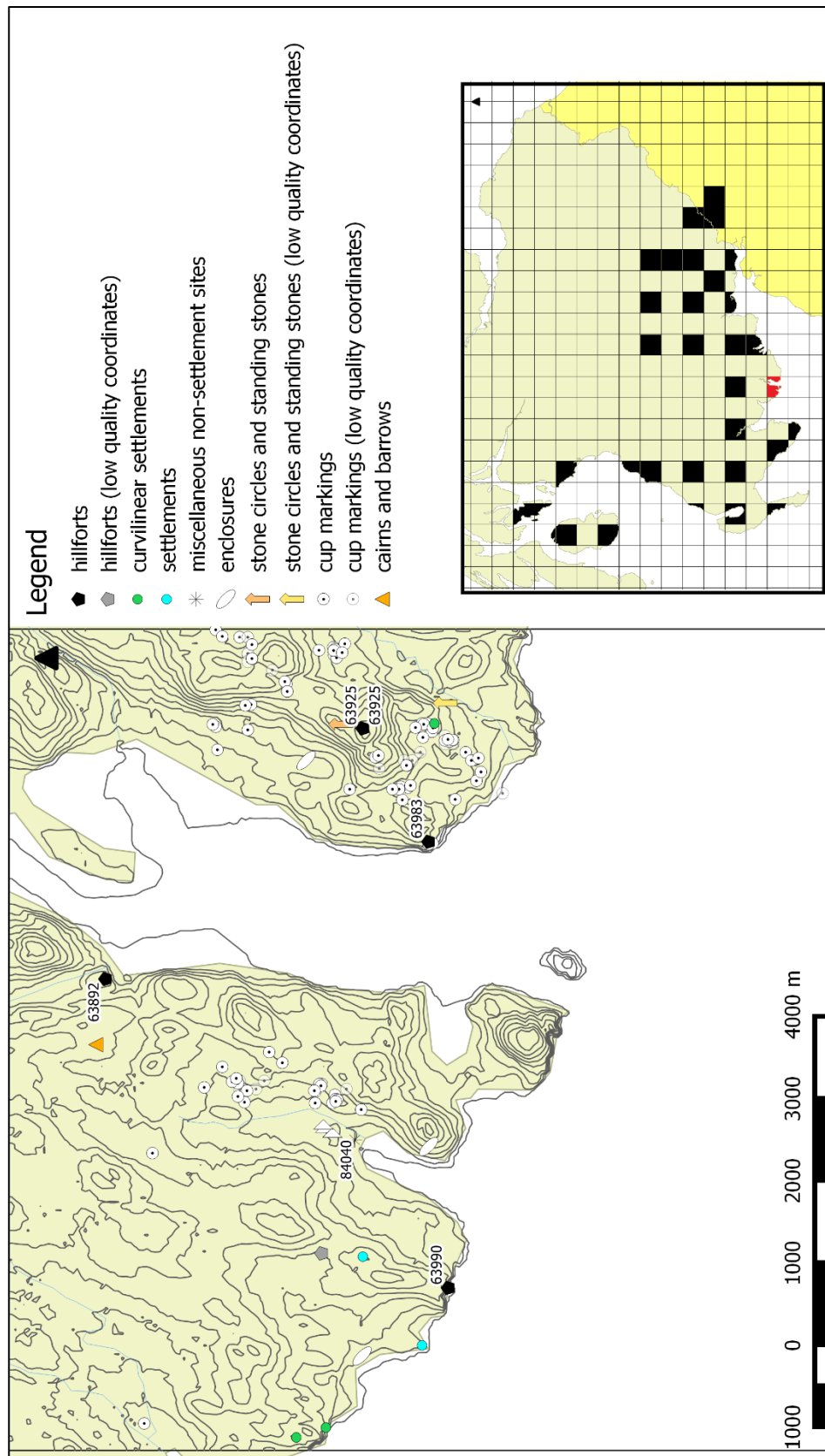


FIGURE 73: TILE NX64 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

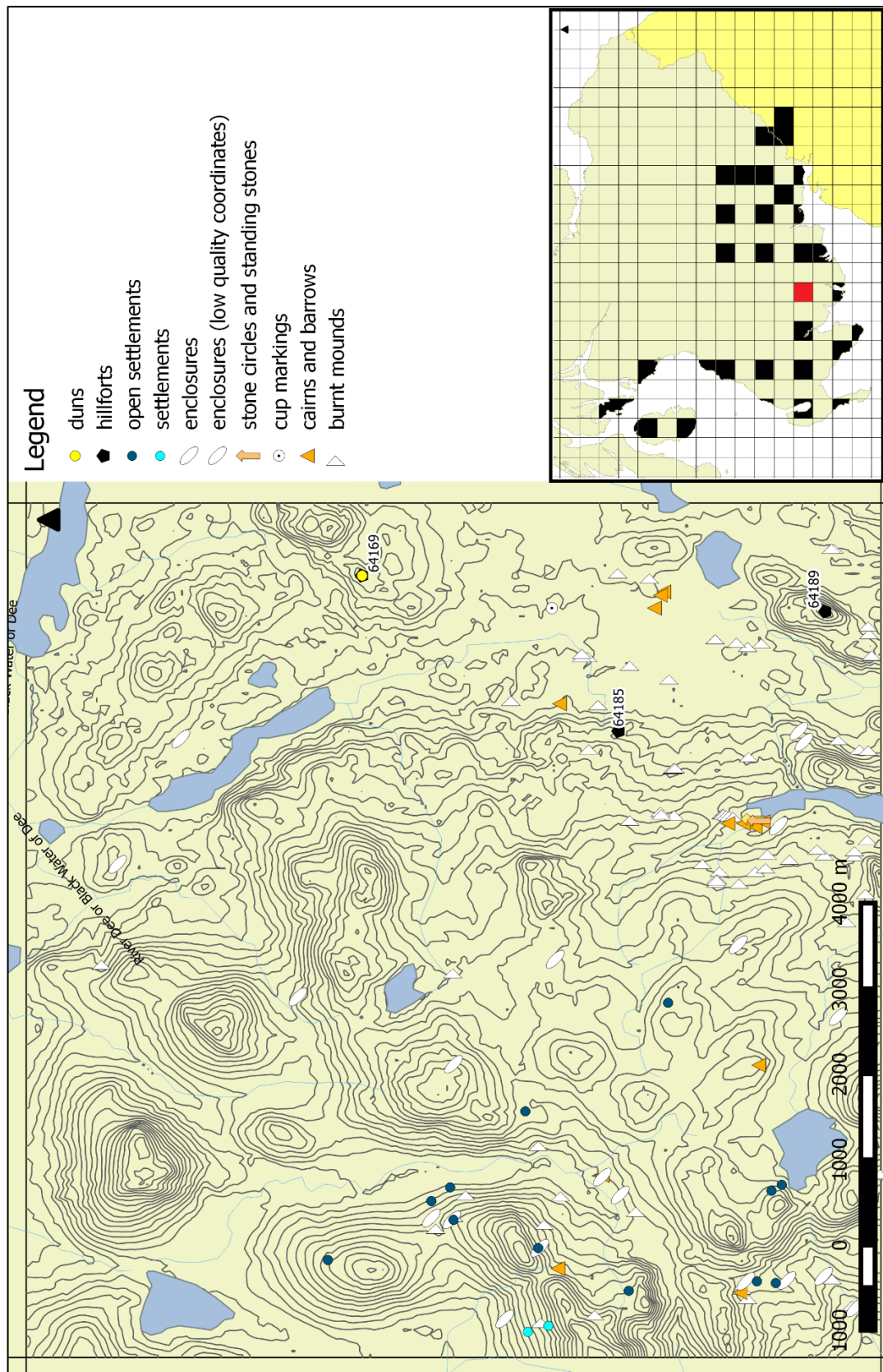


FIGURE 74: TILE NX66 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

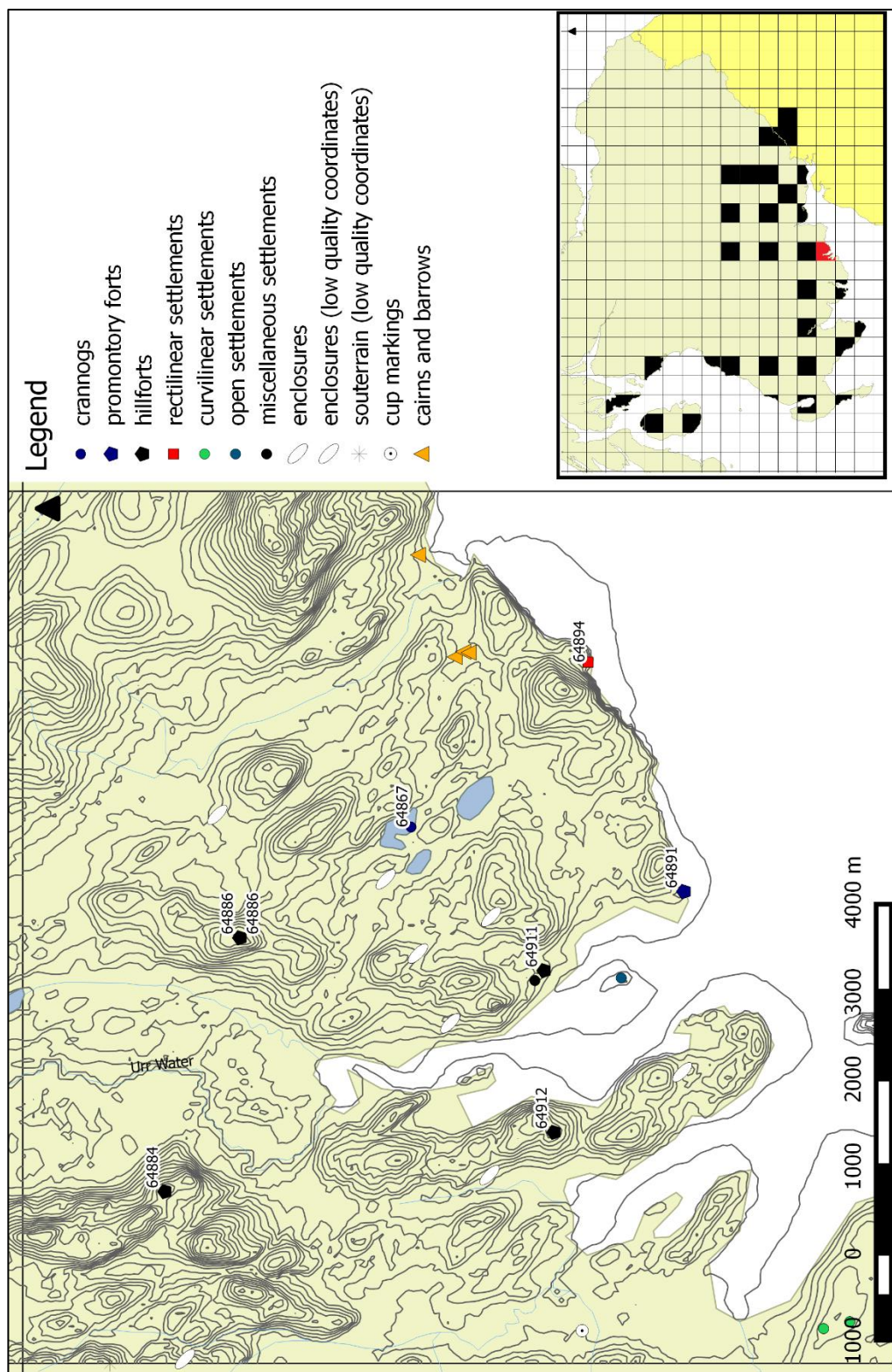


FIGURE 75: TILE NX85 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

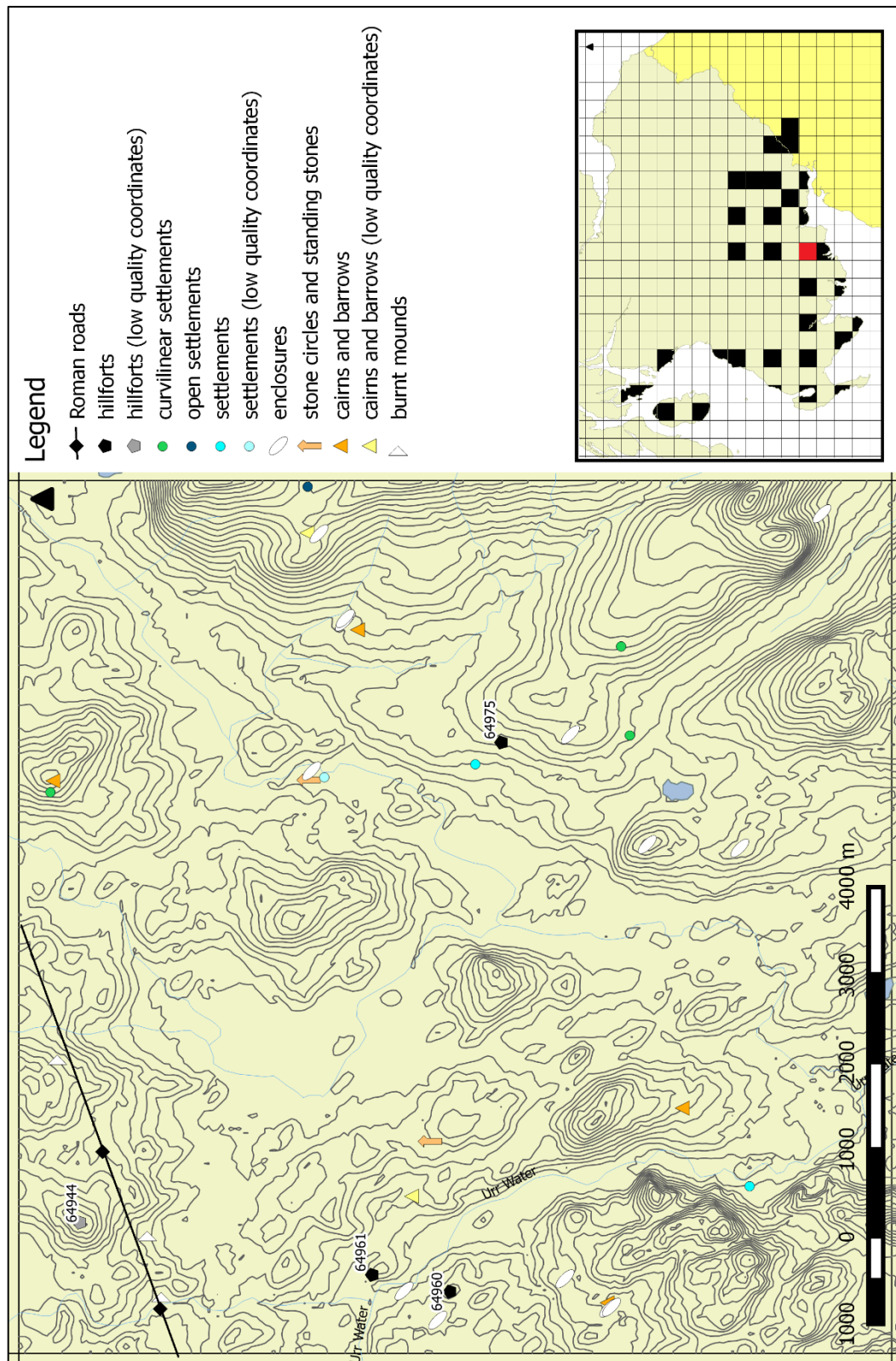


FIGURE 76: TILE NX86 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

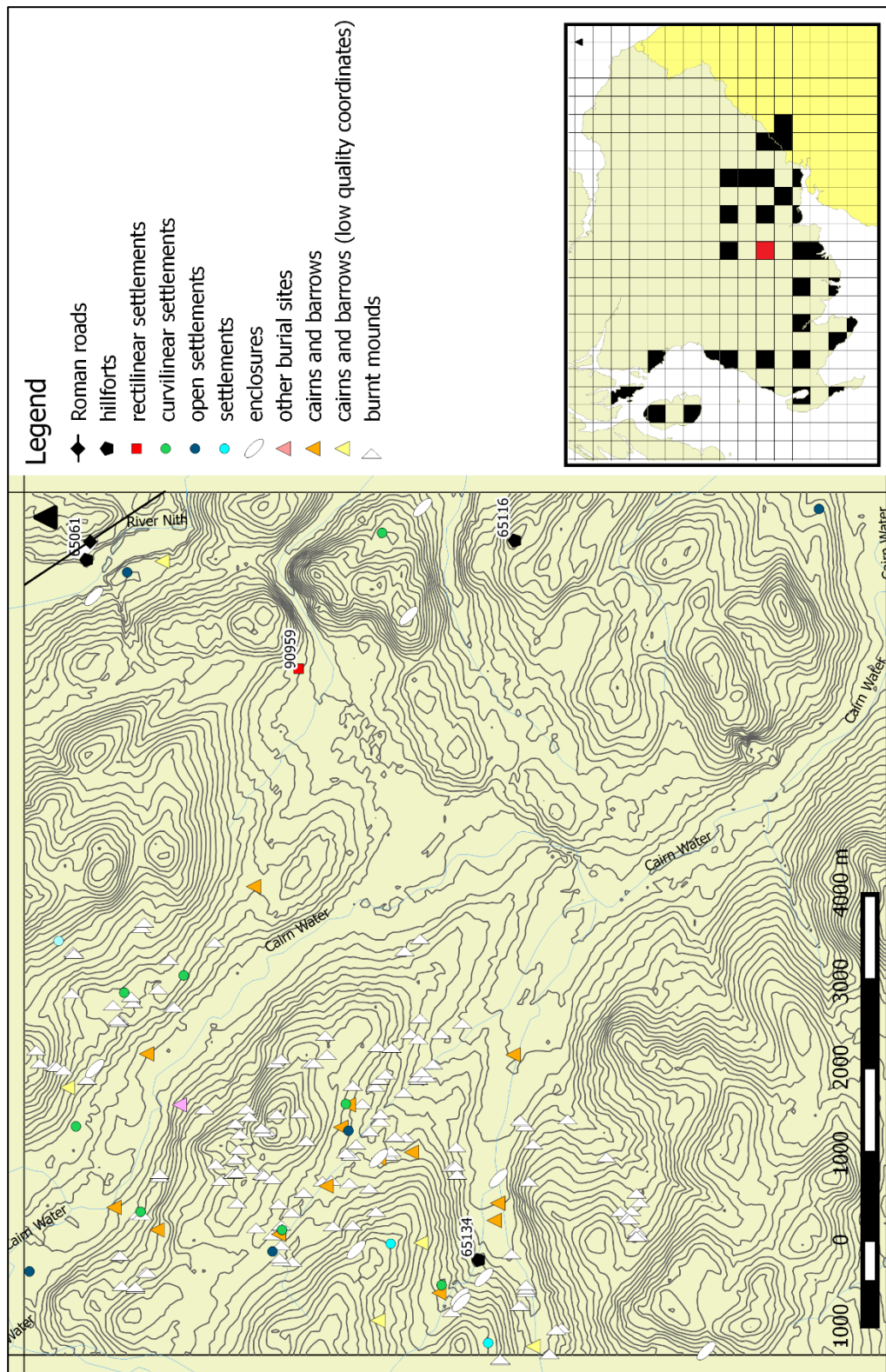


FIGURE 77: TILE NX88 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017, ORDNANCE SURVEY (DIGIMAP LICENSE))

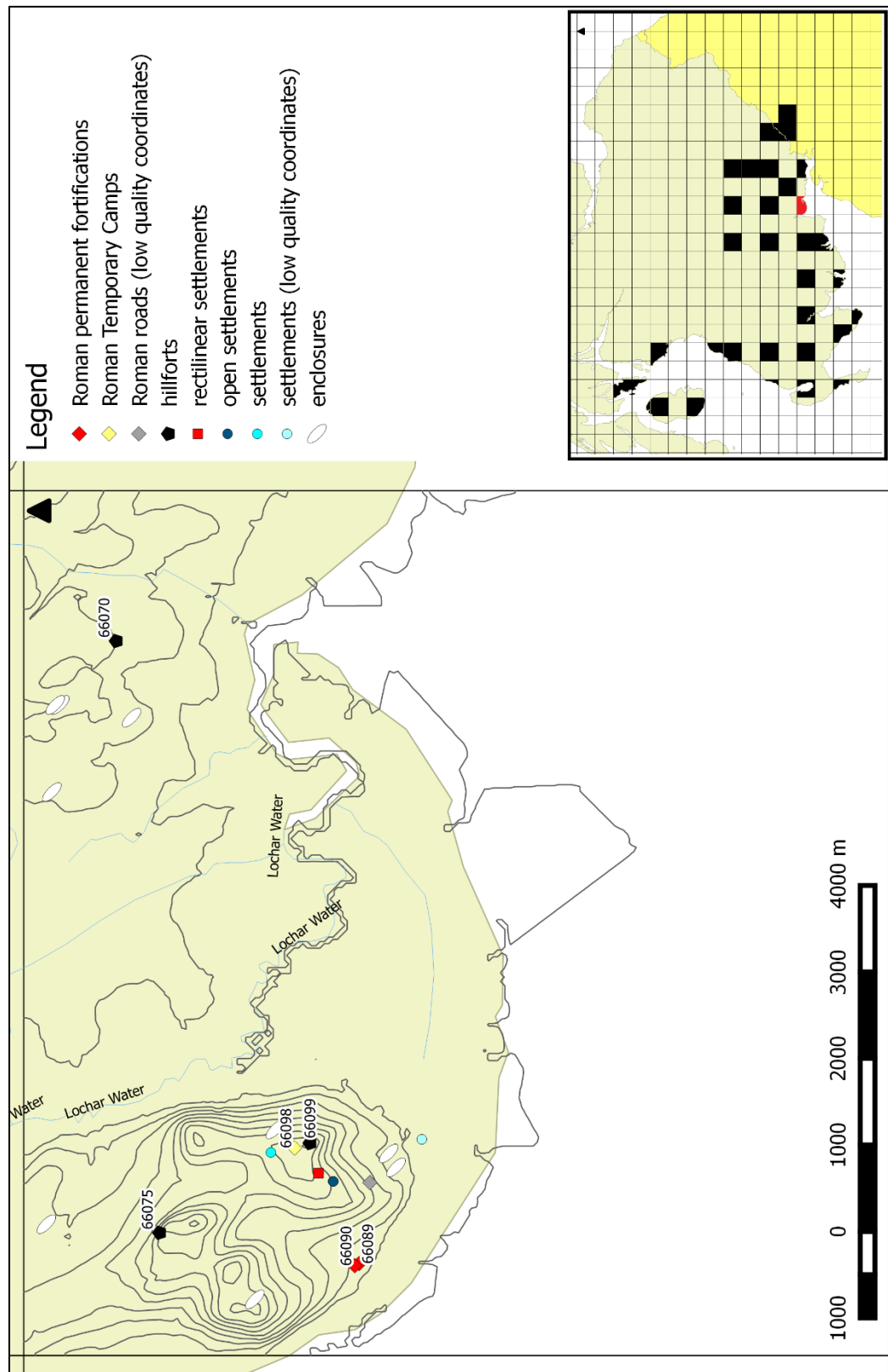


FIGURE 78: TILE NY06 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

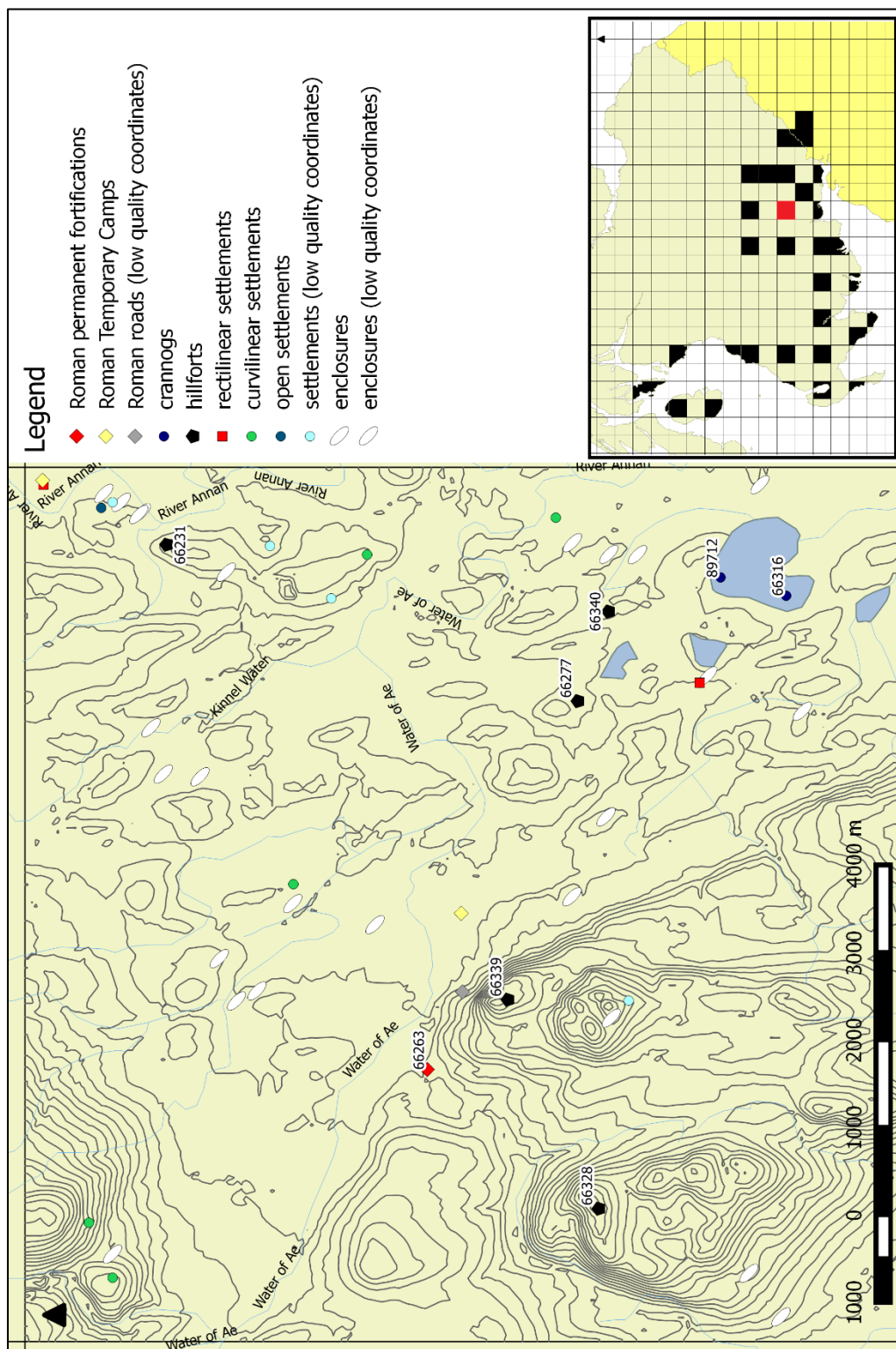


FIGURE 79: TILE NY08 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

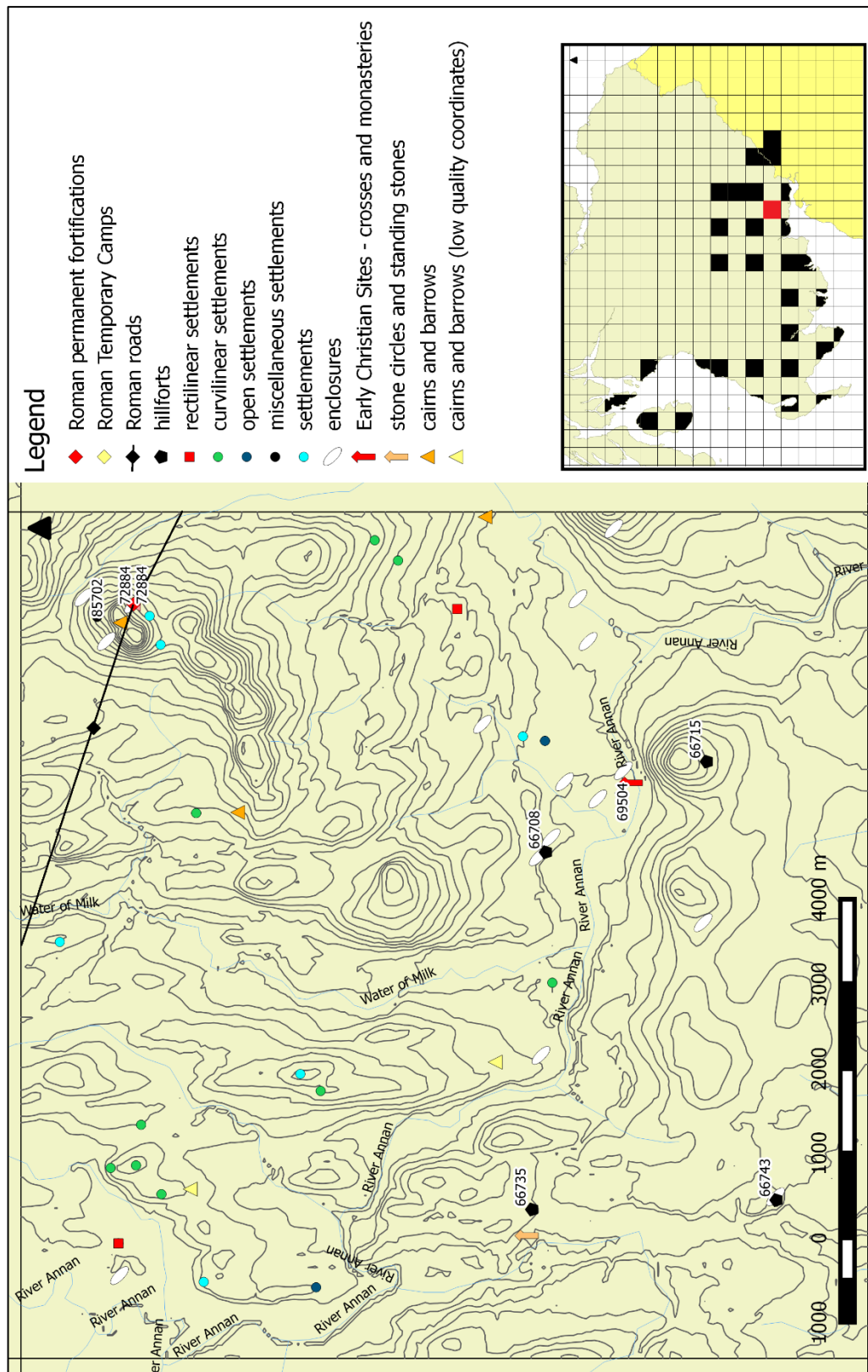


FIGURE 80: TILE NY17 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

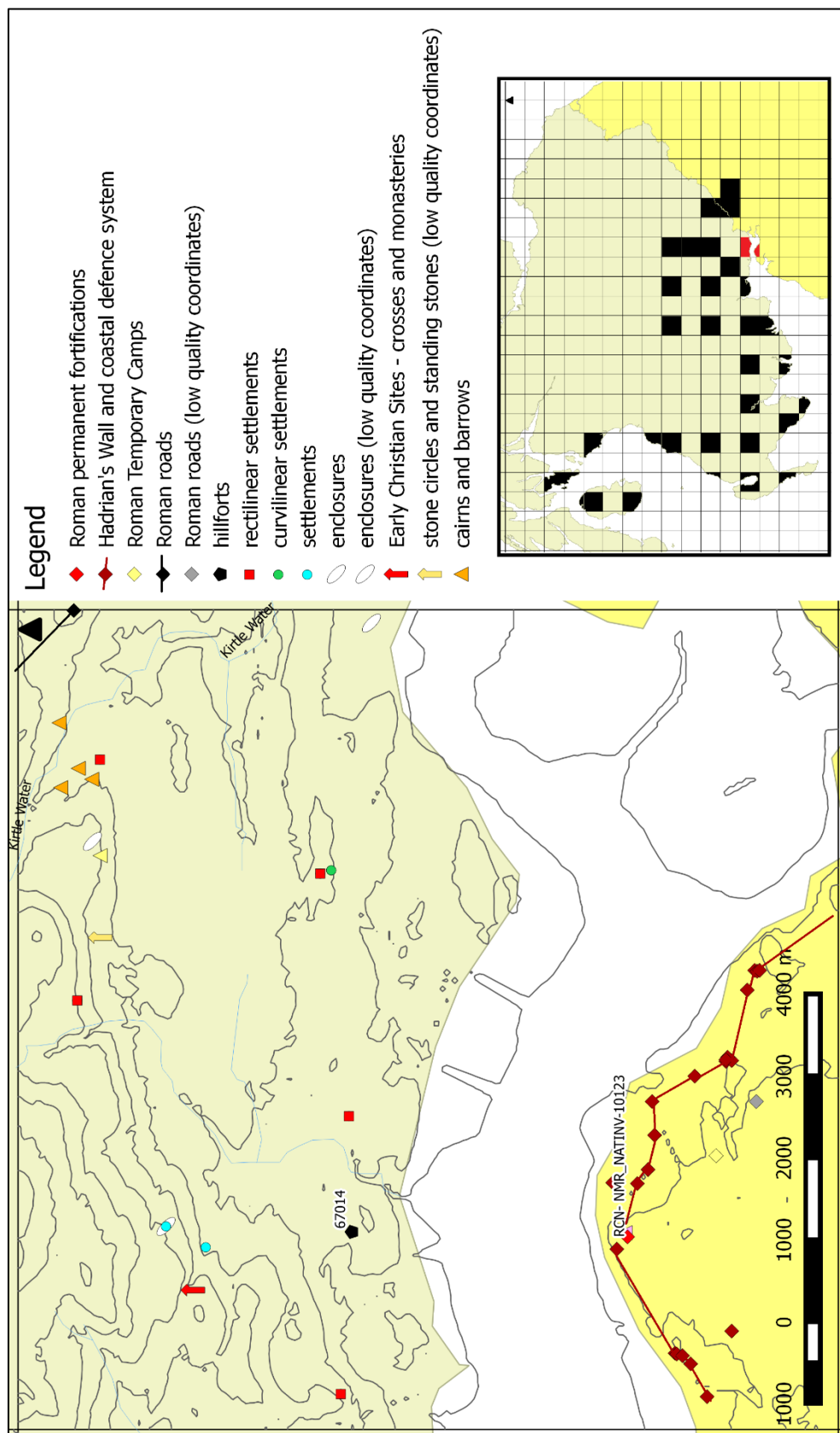


FIGURE 81: TILE NY26 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

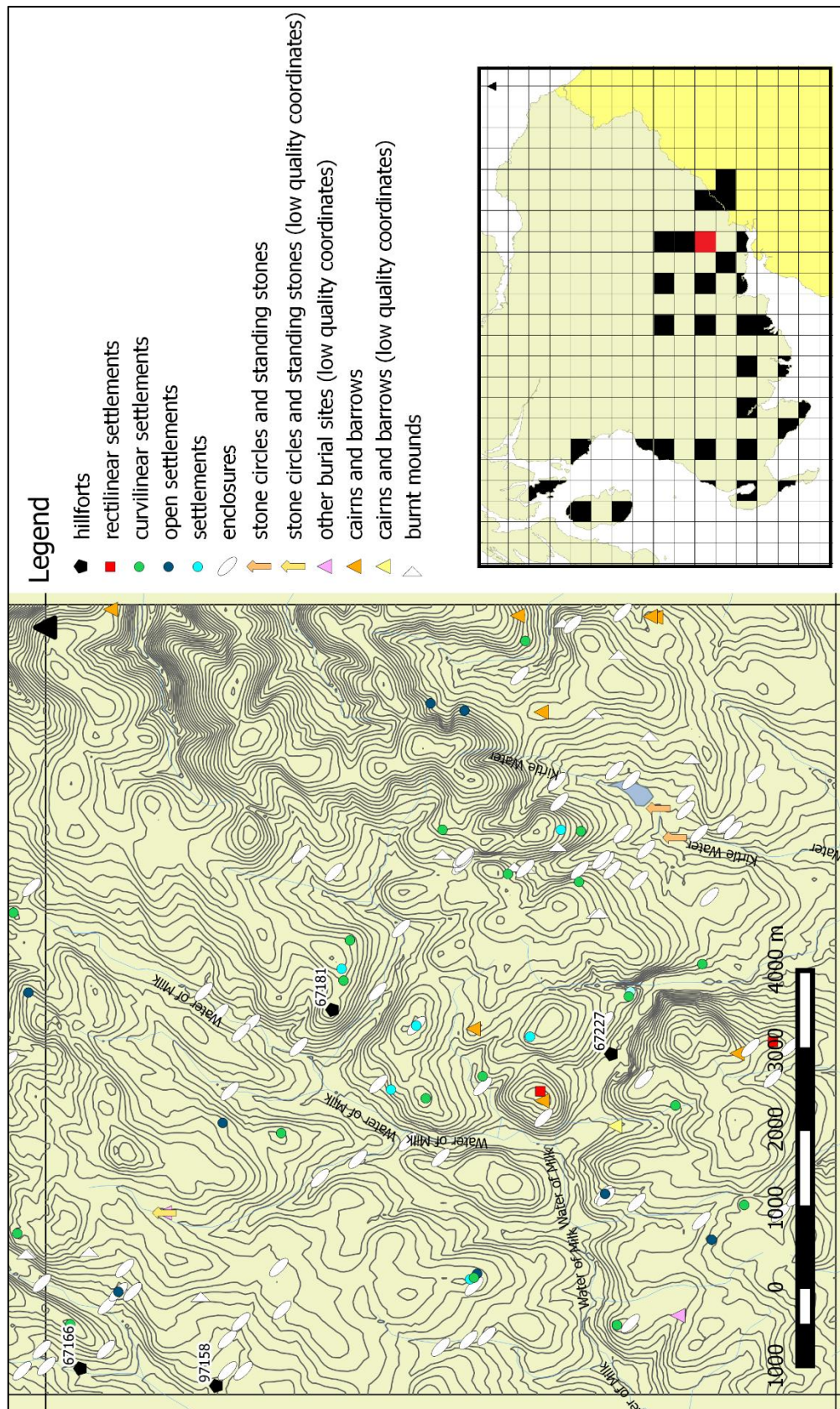


FIGURE 82: TILE NY28 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

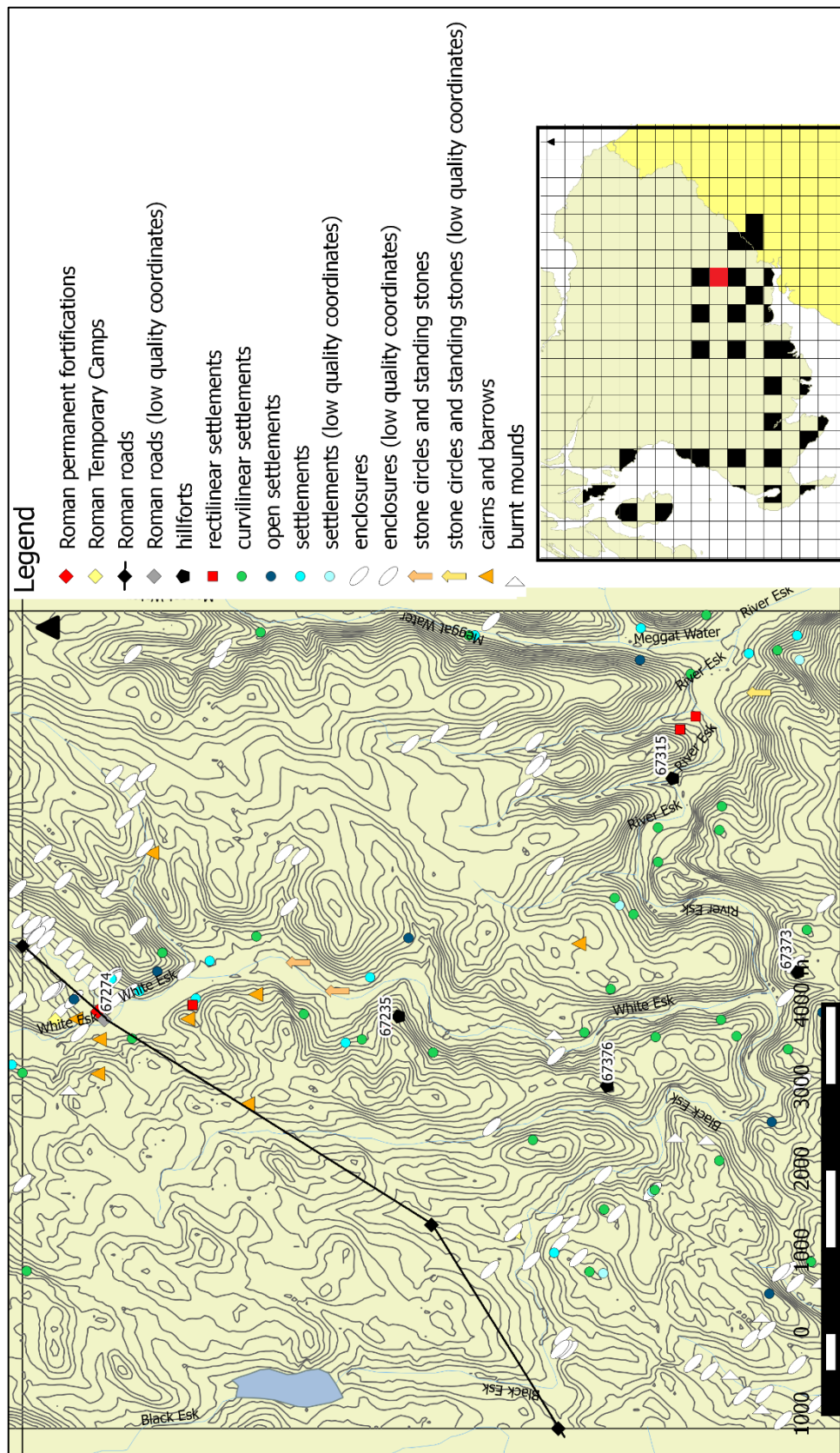


FIGURE 83: TILE NY29 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

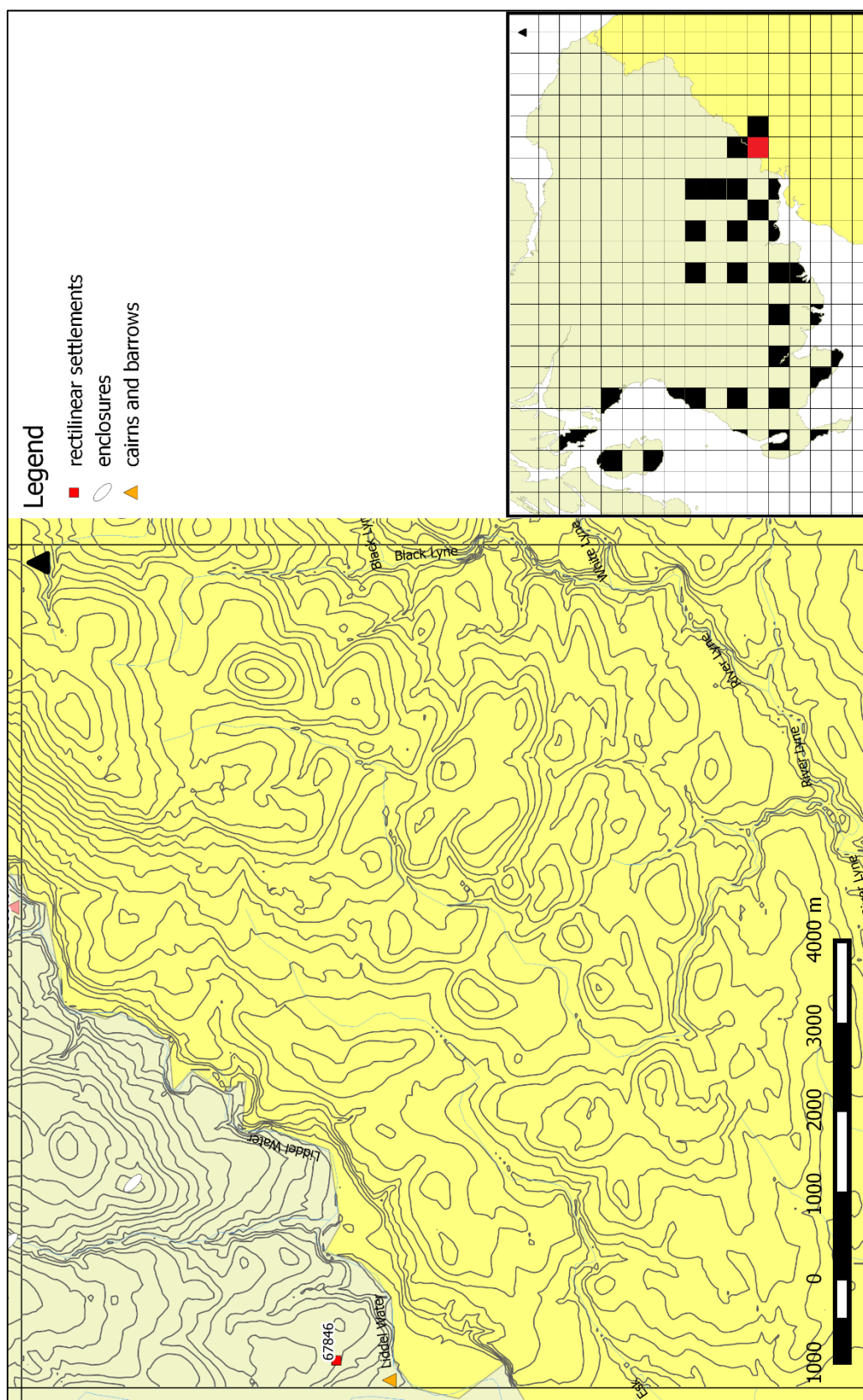


FIGURE 84: TILE NY47 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

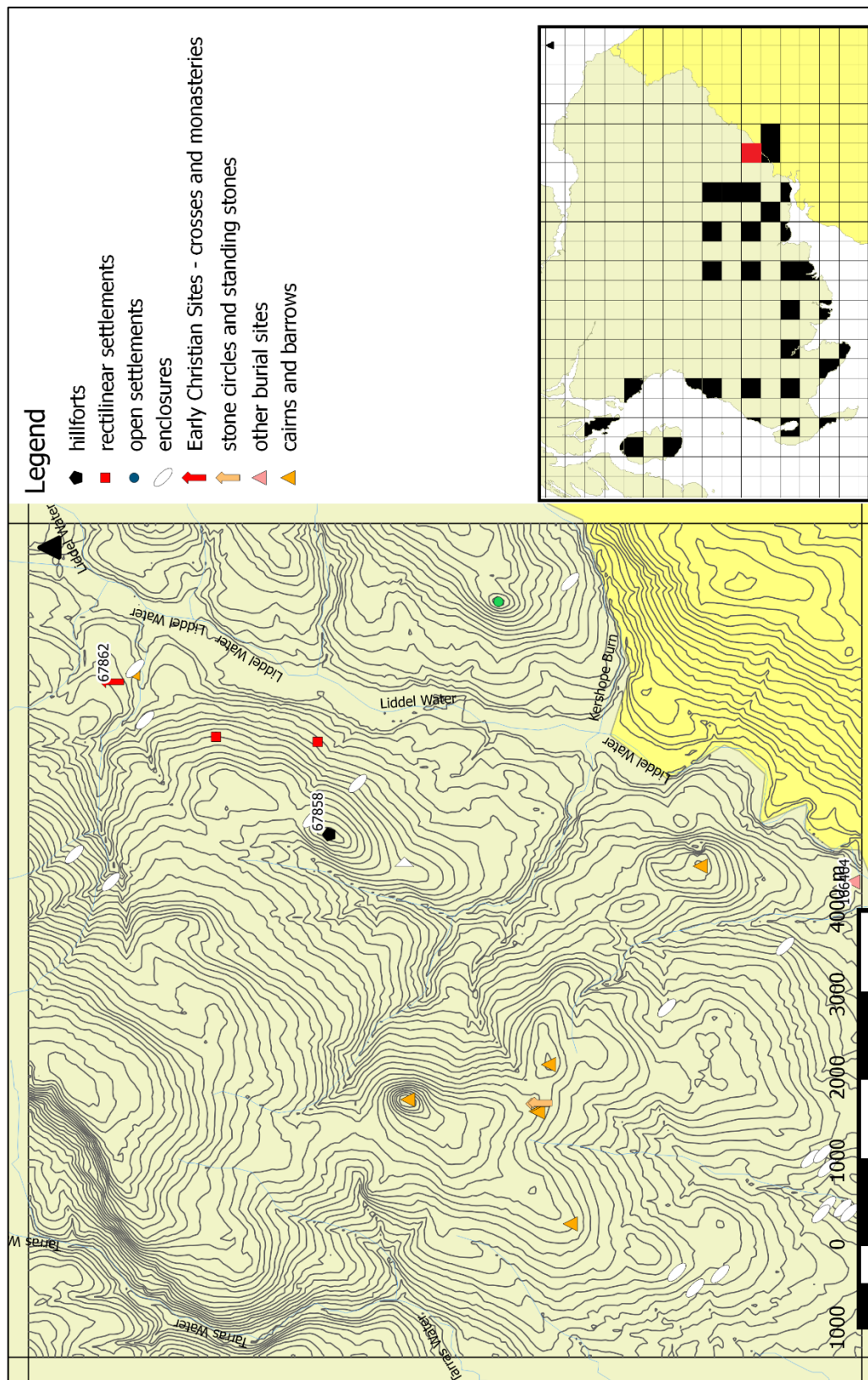


FIGURE 85: TILE NY48 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

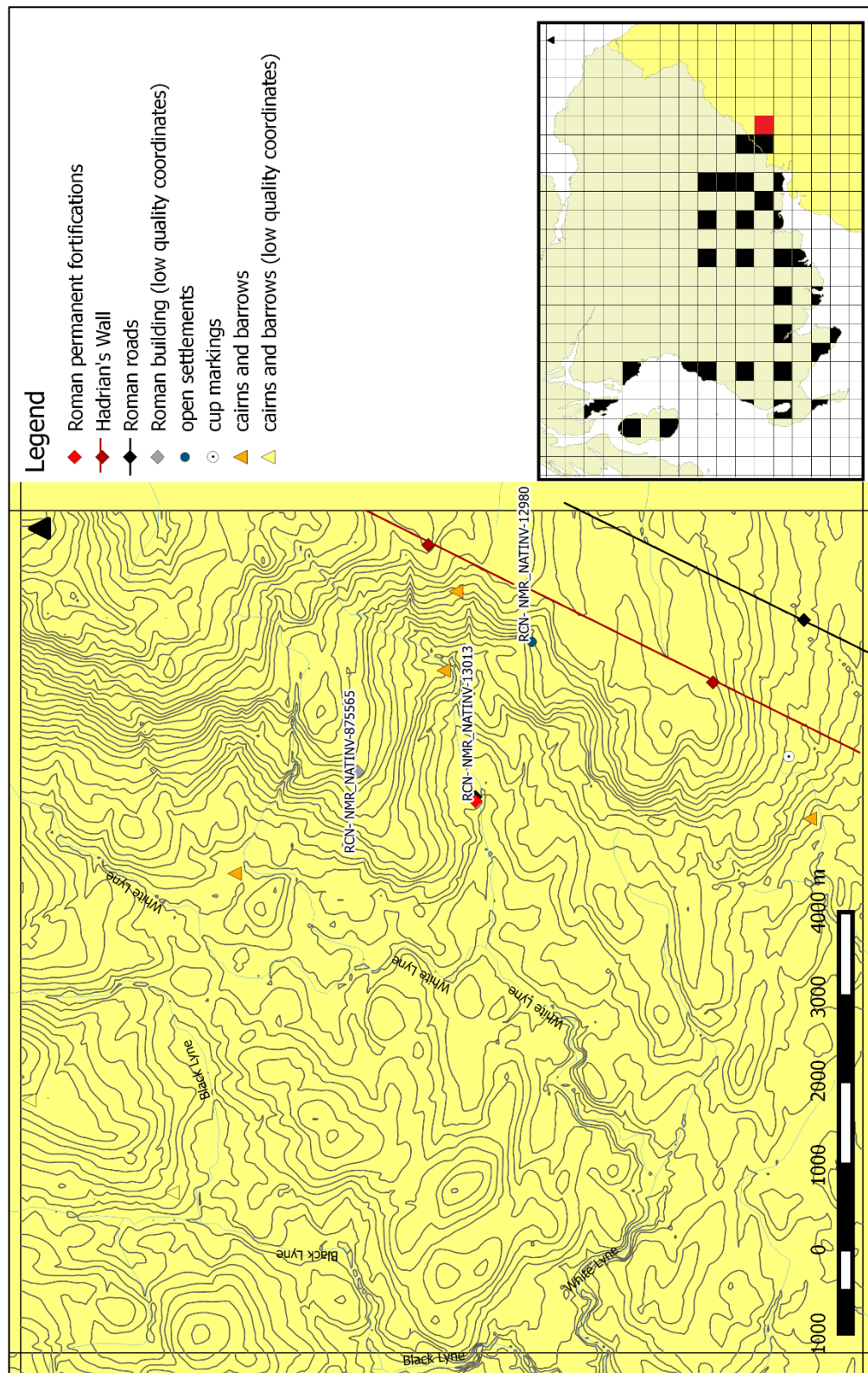


FIGURE 86: TILE NY57 (©CROWN COPYRIGHT AND DATABASE RIGHT 2017. ORDNANCE SURVEY (DIGIMAP LICENSE))

APPENDIX 2: MATERIAL CULTURE AND COINS

This catalogue is intended as a unitary overview of the material culture of the region and as a general aid to the discussion of the Late Iron Age and Early Historic periods in the thesis. In the case of multi-period sites with earlier or later phases than the study period, only the items which are either certainly or plausibly Late and Roman Iron Age or Early Historic are listed. The objects are listed following the categories used by Crummy (1983). Since in most cases the following catalogue has been composed from composite sources for each site, as many of them have not been fully published, the references to the site's assemblage, when they exist beyond Canmore, can be found in Appendix 3 – Gazetteer.

<i>ITEMS OF PERSONAL ADORNMENT OR DRESS</i>	Broken bronze button and loop fastener of Wild class III
Aitnock, settlement, 41205	Fragment from a bronze trumpet brooch (Roman Iron Age)
Yellow glass bead, possibly of Roman Iron Age date	Eleven fragments from opaque white glass armlets (Roman Iron Age)
Blackwood Hill, stray find, 65056	Fragment from an undiagnostic opaque light blue glass bead with a white trail inlay
Brownish yellow glass bead of Roman Iron Age date	Blue glass melon bead of Roman Iron Age date
Boatford, stray find, 65150	Fragment from an opaque sky-blue fused bead of Roman Iron Age date
Green glass melon bead of Roman Iron Age date	Fragment from an undiagnostic small annular yellow glass bead
Boonies, settlement, 67818	Fused fragment of Roman Iron Age light blue glass
Fragment from one or more opaque white glass armlets of Kilbride-Jones type 3A	Carghidown Castle, settlement, 63132
Bronze brooch of Fowler type A3 in poor conditions	Three lead beads
Boreland of Longcastle, stray find, 84023	Carlingwarck, hoard, 64624
Romano-British dragonesque brooch	Fragment of a Romano-British iron linch-pin with a spatulate head and hook
Buittle Castle, settlement, 65002	Head of a linch-pin similar to the item above
Brooch (unidentified)	D-shaped iron loop (buckle?) of probable Roman manufacture
Faience glass bead	
Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702	

Carneycroft, stray find, 65307

Dark glass bead with white opaque lines

Carronbridge, settlement, 65197

Roman Iron Age trumpet brooch in a copper alloy, consistent with examples from Carmarthen

Roman Iron Age annular green glass bead

Roman Iron Age brown globular glass bead

Roman Iron Age faience glass bead

Opaque white glass armlet of Kilbride-Jones type 3A

Castle O'er, settlement, 67376

Seven glass melon beads of Roman Iron Age date

Roman Iron Age glass finger ring

Roman Iron Age bauxite bead from Antrim

Jet beads and discs of Roman Iron Age

Castle Hill, settlement, 41199

Fragments from a Roman Iron Age glass melon bead

Dragonesque bronze brooch of Feachem's circular device type, with a flattened boss and traces of red enamel

Penannular plated bronze brooch of Roman Iron Age date

Colvend, stray find, 300125

Button-and-loop copper alloy dress fastener of Wild Class III

Crossmicheal parish, burial, 64585

Translucent blue glass bead

Roman Iron Age green glass melon bead

Cults Loch, settlement, 276231

Blue and white glass bead

Dally Bay, stray find, 60348

Glass melon bead

Dowalton Loch, ritual deposition locus/settlement, 63208

Leather shoe, of unclear Roman or Early Historic date

Bronze penannular brooch

Fragments of several glass armlets

Roman Iron Age glass melon bead

Dunagoil, settlement, 40291

Lignite armlets with grooved and spiral decorations

Dumb-bell shaped dark blue glass bead

Ericstane, stray find alongside Roman road, 48485

Gold fibula with semi-circular bow of Roman Iron Age date

Flint Howe - Luce Sand, stray find, 61304

Two penannular brooches of likely Early Historic date

Bronze pin

Galdenoch, stray find, 61616

Blue glass melon bead

Glass Rig – Mitchellsacks, stray find, 65965

Blue glass melon bead

Glenhead, settlement, 41053

Bronze fragments from a spiral finger ring

Glenluce, stray find, 61167

Blue glass melon bead

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Blue annular glass bead with white stripes in a chevron pattern

Fragment of a blue globular glass bead

Fragment of a decorated green barrel-shaped glass bead

Kirkchrist, stray find, 62852

Glass bead (Early Historic ?)

Kirkconnel, settlement, 67073

Early Historic glass eye bead

Kirkcowan, stray find, 62994

Brownish bead with yellow stripes

Knockdoon – Luce Sands, stray find, 61244

Greenish-blue star-shaped glass bead

Little Dunagoil, settlement, 40280

Fragment of a bone comb, from a Roman Iron Age context

Lignite ring pendant with an hour-glass perforation, with significant traces of wear, from an Early Historic context

Fragment of a lignite armlet, from an Early Historic context

D-shaped fragment of a serpentine ring, ca.7.6cm in diameter, from an Early Historic context

Fragment of a bone ring, from an Early Historic layer

Lignite ring fragment, recovered from the cave area of the site

Bone pin fragment, recovered in the cave area of the site

Perforated stone disc, recovered in the Lower Enclosure area of the site

Fragment of a polished lignite ring or small armlet

Fragment of a large lignite ring or armlet with squared edges

Loch Ronald, stray find, 62402

Bead of vitreous paste with yellow spots (possibly Early Historic)

Lochspouts, settlement, 40831

Fragments of two polished stone discs

Polished jet ring, ca 3 cm in diameter

Fragments from two jet armlets

Polished bone pin

Decorative bronze piece, vaguely reminiscent of a bee

Small yellowish glass bead of Roman origins

Small glass bead, with a green glaze, of Roman origins

Broken large glass bead, glazed green, of Roman origins

Smooth amber-coloured glass bead variegated with yellow slag, of Roman Iron Age date

Ornamental piece in bronze composed of two joined spirals of unequal size

Worn jet ring

Amulet (?) of worked rock crystal

Ornamental piece in bronze composed of a concave semi-sphere attached to a triangular handle

Broken penannular finger ring in bronze

Unique jet pendant with a perforated lug, cut through twice, with a perforated regular cross within the circle. Both the circle and the arm of the cross are decorated with a ring-and-dot pattern

Mosspebble, settlement, 67811

Circular blue glass bead

Mote of Mark, settlement, 64911

Domed jet pinhead

Two pins in bone and metal

Two pale blue glass beads

Green glass bead with white marving cables

Semi-opaque barrel-shaped blue glass bead

Red-brown annular glass bead

Fragment of a turquoise glass bead

Fragments of an opaque white segmented glass bead

Globular green embossed glass bead

Two fragments of globular jet beads

Two d-section jet rings

Jet bead or whorl shaped like a truncated cone

Perforated lead disc

New Abbey – Sweetheart Abbey, stray find, 65467

Small, bun-shaped iron bloom (Early Historic)

Marvered Early Historic glass bead from Ireland

Marvered glass bead from South-East England

Penninghame, stray find, 63570

Small glass melon bead

Plunton Castle, stray find, 64142

Thin decorated strap bracelet in bronze, cast and beaten, in two parts. It is in moderate conditions, with evidence of wear

Portankill, stray find, 61068

Fragment of a Romano-British glass bracelet of Kilbride-Jones type 2

Pothouse, stray find, 66016

Discoidal stone bead

Rainton, stray find, 64156

Large whorl bead of Antrim bauxite, of Roman Iron Age date

Rispain Camp, settlement, 63122

Fragment of a sandstone ring

Curved fragment of bronze with lozenge-shaped coloured enamel decoration, possibly from a bracelet

Seamill, settlement, 40997

Worked shale

Small bone plate perforated at both ends

Small decorated bronze ring in very poor condition

Bronze finger ring

Stevenston Sands, stray find, 41066

Flat dark blue glass bead, with notches around the edges, possibly of Roman Iron Age date

Lozenge-shaped bronze brooch with a central cloison and a unique decorative pattern: brown enamel at the acute angles and light blue enamel at the obtuse angles, possibly Roman Iron Age in date

Complete bronze pin and fragments of a second

Large collection of shale rings and armlets, in different styles, some of which are reminiscent of items from Glenluce Sands, and other which are reminiscent of pieces of Anglo-Saxons contexts

SURGICAL INSTRUMENTS

Buittle Castle, settlement, 65002

Two iron blades, morphologically compatible with Roman surgical blades

Carlingwarck Hoard, hoard, 64624

Two tanged blades from a double-edged knife, consistent with Roman veterinary or surgical implements

*ITEMS FOR THE MANUFACTURE OR
WORKING OF TEXTILES*

Airyolland, settlement, 62706

Unfinished spindle whorl made of stone

Aitnock, settlement, 41205

Stone spindle whorl

**Burnswark, settlement, 72833; 72884;
72886; 72887; 85701; 85702**

Stone spindle whorl

Castle O'er, settlement, 67376

Unspecified quantity of spindle whorls

Closeburn, stray find, 65252

Neck sherd of coarse-ware flagon

Glenhead, settlement, 41053

Stone spindle whorl

Kirkconnel, settlement, 67073

Stone spindle whorl

Little Dunagoil, settlement, 40280

Bone spindle whorl

Bone awl

Lochspouts, settlement, 40831

Bone awl

Lead spindle whorl

Milton Loch Crannog, settlement, 65046

Stone spindle whorl

Mosspeeble, settlement, 67811

Stone spindle whorl

Mote of Mark, settlement, 64911

Sinker or loom weight in pottery

Three spindle whorls, in lead and stone

St. Blane's, monastery/graveyard, 40292

Stone spindle whorl

*HOUSEHOLD UTENSILS AND
FURNITURE*

Aitnock, settlement, 41205

Sherd of a Samian bowl, possible of Dr. type
18 – 31

Pottery sherd with a reddish colour, possibly
from Roman coarse ware

Possible heating stone

Quern and millstone

Ardeer, souterrain, 41069

Clear glass fragment, of potential but not
proven Roman Iron Age date

Ashgrove Loch, settlement, 41054

1st or 2nd century AD bronze cooking pots

Auchenskeoch, stray find, 46386

Two Roman bronze goblets and a tinned
patera, ca. 2nd century AD in date, destroyed
during discovery

Ballantrae, stray find, 60939

Worn sherd of Samian

Boonies, settlement, 67818

Three top stones and a bottom stone from
rotary querns

Oval shaped stone pounder

Six wall sherds and a rim sherd of Roman
Iron Age pottery, all with a dark red outer
surface and a dark gritty core

Rim sherd from a small Roman bowl with a
red buff fabric

Base sherd and wall sherd from a Roman
vessel, both with orange coloured fabric

Brighthouse Bay, midden, 84040

Sherds from various Roman forms,
including coarse and Samian wares

Stone pestle

Buittle Castle, settlement, 65002

Sherd from an unidentified Samian vessel

Shards from different types of coarse wares, including amphorae

Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702

Ca. 170 shards from ca. 12 handmade vessels of varying shapes and fabrics. The shards are too small to allow conclusive identification of the original forms

Several sherds from six Central Gaulish Samian vessels of Dr. 27, 18/31 and 32 forms (overall Antonine date)

Shards from 12 coarse ware vessels of different typology and overall second-century date

Part of a saddle quern and of two rotary querns carved in sandstone

Three hones and a possible grinding stone

Caerlaverock, pits, 330112

Undiagnostic prehistoric pottery fragments

Carlingwarck, hoard, 64624

Inscribed fragment from an unusually large greenish gladiator glass cup. The only readable letter from the inscription is "A"

Bronze santon cauldron, with traces of extensive repairs in two distinct styles

Fragment of bronze sheet with evidence of repairs, probably from a cauldron such as the above item

Handle from a bronze mirror similar to North-English examples of Roman Iron Age date

Handle from a decorated bronze tankard stylistically consistent with but degenerate from examples from Aylesford (Southern England, Roman Iron Age)

Roman iron cooking grid

Roman iron cooking tripod

Cast or spun bronze bowl

Castle Hill, settlement, 41199

Several sherds from an unspecified number of Samian vessels, including an almost complete Dr. 18 bowl and other second-century undecorated forms

Fragments from at least two large green glass jars

Fragments of two decorated pale yellow glass containers

Pieces from several querns

Clachan Ard, settlement, 40269

Quernstone

Coal Hill, settlement, 41013

Three querns

Corncockle Moss, settlement, 97540

Seven oaken vessels

Crawthat Cottage, settlement, 67227

Sherd with a whitish buff, Early Historic or later

Cults Loch, settlement, 276231

Saddle quern

Square wooden vessel

Dowalton Loch, ritual deposition locus/settlement, 63208

Sherd from a Dr. 37 type vessel

Roman iron skillet in excellent conditions. It is decorated with Medusa's head and is grooved at regular intervals on the inside

2 bronze bowls, made with new bronze rather than re-melted scrap

Dumfries – Dalbeattie road, pits, 281600

Undiagnostic prehistoric pottery fragments

Girvan – The Currach, settlement, 345286

Querns and other household implements

Glenhead, settlement, 41053

Sherds of Roman glass

Sherds of Samian ware

Rim sherd, consistent with pottery from Vaul, Tiree

Coarse ware sherds

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Three sherds of Early Historic grass tempered ware, possibly associated with the pre-monastic settlement phase of the site

Yellowish glass sherd with decorations on the internal surface

Three quern stones

Kirkconnel, settlement, 67073

Early Historic coarse handmade vessel with friable orange-buff fabric and medium grits

Kirkton, stray find, 333896

Samian sherd, possibly associated with a near-by Roman fortification

Langholm, stray find, 67655

Bronze tripod (undated)

Largs, settlement (?), 41165

Square clay tiles approximately 29.2cm large and 5cm deep, consistent with Roman flooring

Little Dunagoil, settlement, 40280

Five sherds of grass tempered handmade ware, probably Roman Iron Age

Sherds from a green-glazed handled jar, found in the cave area of the site

Rim and body sherd from a continental bowl of 5th-century date, found by the longhouses area of the site

Two sherds of glazed worn pots from the Lower Enclosure area of the site

Fragment of a pale blue glass vessel, possibly Early Historic

Corroded fragment of an iron handle or hasp, with a square section, found in the Lower Enclosure section of the site

40 shards of handmade coarse ware with traces of fire discolouration

Lochspouts, settlement, 40831

Eleven worn quernstones

Unpolished stone bowl (?)

Unspecified quantity of Samian ware of different Dr. types of 2nd century AD, including at least one example of egg-and-tongue border decorated ware

Fragments of glazed soft pottery, mixed with coarse sand, of Roman origins

Fragments of thick dull black pottery

Wooden cup

Miller's Cairn – Dowalton Loch, settlement, 62699

Bronze basin of Roman Iron Age date

Milton Loch Crannog, settlement, 65046

Stone quern fragment

Mote of Mark, settlement, 64911

Small piece of Samian ware and a piece of *mortarium*

Sherds of white wheel-turned unglazed pottery

Six sherds from different pottery vessels of possibly local manufacture

Imported pottery, of which over 50 shards, from at least 10 vessels, of E ware; shards

from one D ware vessel; and from one Bi amphora (typical of Aegean production)

Assorted sherds from imported glass wares, from at least: two Group B vessels; nine assorted Group C vessels (white rimmed, pink, sky blue conical, asymmetric chevron decoration, pulled festoon decoration); and four or five group D undecorated vessels

White trailed glass vessels from Rhineland

Sherds from a blue-green bottle

Sherds from at least fourteen different glass vessels, of which at least one was decorated

Pottery lamp

Glass *tessera*

Nunholm, settlement, 146501

Black glazed pottery sherd

Over Rig, meeting place (?), 67422

Four wooden bowls

Rispain Camp, settlement, 63122

Cracked stone pot-boiler

Saltcoats, stray find, 41106

Spoon in a metal alloy, of Roman Iron Age date

Seamill, settlement, 40997

Coarse ware sherd (?)

Shillahill, stray find, 66837

Mortarius

St. Blane's, monastery/graveyard, 40292

Roofing slate

Sherds from a cylinder-shaped pottery vessel, with black glaze inside and out

Sherds from green-glazed water jars

Stranraer, stray find, 60763

Upper quern stone, with equal arms cross decoration

Teroy, settlement, 60815

Two small pieces of dark red pottery of Roman Iron Age

Upper stone from a rotary quern

Torr a'Chaisteil, settlement, 39674

Top stone from a quern

Trusty's Hill, settlement, 63641

Bottom stone from a granite rotary quern

Whitehills Moss, stray find, 66278

Battersea type bronze cauldron

ITEMS FOR RECREATIONAL PURPOSES

Mote of Mark, settlement, 64911

Smooth pebbles, possibly used as playing pieces

Rispain Camp, settlement, 63122

Stone gaming piece (?)

ITEMS FOR WEIGHING AND MEASURING

Boonies, settlement, 67818

Possible stone weight

Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702

Roman lead weight

Coal Hill, settlement, 41013

Three perforated stones

Three discs

ITEMS ASSOCIATED WITH WRITTEN COMMUNICATIONS

Mote of Mark, settlement, 64911

Iron styluses

St. Blane's, monastery/graveyard, 40292

Splinter of shale with an incised cross on one side, and the letters DA on the other

Two pieces of slate with Old Irish inscriptions

TOOLS

Carlingwarck, hoard, 64624

Broken iron saw blade

Two iron files, one complete and one broken (undiagnostic)

Roman iron drawknife or spokeshave

Iron tire of native craftsmanship (Roman Iron Age)

Iron cleat, probably used to fasten wood. Similar to but larger than a Roman boot-cleat

Fragments from two distinct iron knife blades, both with a straight back and curved cutting edge

Five iron meat-hooks or fish-hooks, consistent with examples from the Roman fort at Newstead

Castle O'er, settlement, 67376

Flint blade

Castle Hill, settlement, 41199

Iron knife, with traces of a wooden handle

Nail, gouge, rings and other unspecified iron implements

Assorted bone tools

Clachan Ard, settlement, 40269

Smoothing stone, recovered from the kitchen midden

Corncockle Moss, settlement, 97540

Oaken mallet

Cults Loch, settlement, 276231

Assorted coarse stone tools, including hammer stones and grinders

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Iron knife with a concave blade

Kirkconnel, settlement, 67073

Two flint flakes with secondary retouching

Kirkconnel, settlement, 67073

Iron knife blade

Two iron nails, one of which has a square section

Socketed spud with rivet still in place, undiagnostic

Little Dunagoil, settlement, 40280

Assorted stone tools, with traces of wear

Antler knife handle, with iron stains in the socket, from an Early Historic context

Fragments of three iron nails, found in the cave area of the site

Lochspouts, settlement, 40831

Two flint scrapers

Bone chisel

Flat bone knife or spatula

Knife handle in bone

Horn pick

Knife handle (?) in horn

Pointed horn tynes with signs of wear

Wood stave, probably from a milk cog

Brass key

Milton Loch Crannog, settlement, 65046

Plough of non-Roman origins, consistent examples from Lochmaben and the Døstrup traditions. The plough was deposited within the foundation layer of crannog 1

Large wooden gorges and pegs, probably used for catching birds

Mote of Mark, settlement, 64911

Over 100 Late Larnian Flints

Two stone rubbers

Three iron knives of different types

Seven nails or studs

Over Rig, meeting place (?), 67422

Two wooden dirks

Rispain Camp, settlement, 63122

Very corroded iron adze or hoe

Two pieces of worked flint

Seamill, settlement, 40997

Worn bone implement

Trusty's Hill, settlement, 63641

Flint flakes and beach pebbles

*FASTENERS AND FITTINGS***Brighthouse Bay, midden, 84040**

Two undiagnostic iron holdfasts

Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702

Fragments from three knobbed bronze terret rings

Cruciform bronze mount with a central boss surrounded by four petals

Looped bronze stud, with two-petals bosses

Small bronze ring, probably part of the handle of a small box

Broken bronze boss

Bronze runnel

Carlingwarck, hoard, 64624

Fragment of Y-shaped iron suspension chain for cauldrons of Great Chesterford type

Roman iron padlock spring

Two pieces of hinge, in iron, of Roman Iron Age date

Latch-lifter iron lock of native type, likely of Early Iron Age date

Fragments from two distinct two-link bits of native type, in iron, of Roman Iron Age date

Two figure-of-8 decorated iron handle loops, stylistically consistent with an example from Corbridge

Small broken wooden bar

Folded fragment of an ornamental sheet bronze mounting for a box of Roman type

Three Roman iron staples in varying conditions

Three iron handle-loops with a pointed end beaten at a right angle, similar to examples from the Roman fort at Newstead

Four iron punches

Cults Loch, settlement, 276231

Vessel staves

Dalbeattie, stray find, 339343

Copper alloy strap fitting of Roman Iron Age date

Dowalton Loch, stray find, 63207

Bronze mounting of La Tène C style

Lochspouts, settlement, 40831

Button and loop fastener with a muzzle motif

Middlebie, hoard, 67071

Complete bronze bridle bit of three-link type, in very good condition with some signs of wear, of Roman Iron Age date

Complete bronze bridle bit of one-link type in good condition, of Roman Iron Age date

Lost bridle bit of one-link type, similar to the above

Four circular cast bronze rings, possibly from two one-link bridle bits of Roman Iron Age date

Cast bronze petal or cruciform strap-junction in very good condition and decorated with red enamel in panels, of Roman Iron Age date

Cast bronze petal or cruciform strap-junction in good condition, of Roman Iron Age date

Two cast bronze strap-junctions of elongated form in very good condition with no sign of wear, of Roman Iron Age date

Incomplete cast-bronze strap-junction similar to the above items

Two cast bronze terret rings with a straight bar and grooved collars, in very good conditions, of Roman Iron Age date

Simple cast bronze terret, in moderate conditions with signs of wear and some casting flaws, of Roman Iron Age date. The original straight bar is missing

Cast bronze knobbed terret with signs of wear. This terret is identical to the above item, but it was cast from a different mould

Fragment of a bronze terret in poor condition, with evidence of a possible flawed casting, of Roman Iron Age date

Cast bronze platform terret with red enamelled decoration, in very good condition, of Roman Iron Age date

Two cast bronze knobbed terrets, in very good condition, of Roman Iron Age date

Cast bronze knobbed terret with a tanged bar, in very good condition, of Roman Iron Age date

Cast bronze knobbed terret with a slender bar, in very good condition, with possible traces of wear, of Roman Iron Age date

Milton Loch Crannog, settlement, 65046

Bronze loop, either for a belt or a horse harness, with traces of red and yellow enamel, of Roman Iron Age date

Mote of Mark, settlement, 64911

20 decorated iron buckles and/or straps

30 iron studs

Seven iron rings/hoops and assorted fittings

Two bone fittings

Eleven stone rubbers

ITEMS ASSOCIATED WITH AGRICULTURE AND FARMING

Carlingwarck, hoard, 64624

Fragments from four distinct iron scythes of Roman Iron Age date

Tanged fragment of a Llyn Cerrig type 'balanced' iron sickle (undiagnostic)

Cults Loch, settlement, 276231

Ard, in good conditions with no signs of use

MILITARY EQUIPMENT

Brighthouse Bay, midden, 84040

Iron spearhead

Buittle Castle, settlement, 65002

Bronze stud of possible Roman military origins

Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702

Two iron spearheads, at least one of which is definitely of Roman manufacture

Corroded iron sword blade, probably of Roman origin

133 Roman lead slingshots, cast from several moulds

Nine tanged iron arrowheads with three barbs

Eleven whole *ballista* balls and nine fragments from other such stone projectiles

Seven possible stone slingshots

Carlingwarck, hoard, 64624

Eight iron sword tips, comparable to the Llyn Cerrig series of native sword types (Roman Iron Age)

Fragments of Roman chain-mail

Broken iron plate with rivet holes, possibly from a Roman shield boss

Roman iron axe head

Castle Hill, settlement, 41199

Cast bronze sword guard of Piggot type IVB, in good conditions but with evidence of wear

Iron axe

Four iron spear-heads, two socketed and two tanged

Coal Hill, settlement, 41013

Stone ball, similar to a *ballista* ball

Dowalton Loch, ritual deposition locus/settlement, 63208

Iron axe-heads

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Leaf-shaped iron spearhead with a socketed tang

Lochspouts, settlement, 40831

Horn club (?)

Part of a spear made of horn, ca. 22 cm long and 4 cm wide

Small iron hand dagger, ca 15 cm long, in very poor condition and with traces of riveting

Middlebie, hoard, 67071

Cast sword hilt of Piggot group IVB, in good condition and with evidence of wear from the now lost blade; it is decorated with a symmetrical arrangement of lobed stems in relief

Rispain Camp, settlement, 63122

Flanged axe head of Bronze Age date

Seamill, settlement, 40997

Stone ball, approximately 3.8cm in diameter

Stevenston Sands, stray find, 41066

Group III iron hilt guard with attached fragment of a sword blade, ca. 4.4cm wide

ITEMS ASSOCIATED WITH RELIGIOUS BELIEFS AND PRACTICES

Boonies, settlement, 67818

Four possible stone charms

Milton, stray find (possible association with a Roman fortification), 48423

Dolphin statuette

Stelloch, stray find, 62754

Small bronze statuette of Mercury, of Roman manufacture

ITEMS AND WASTE MATERIAL ASSOCIATED WITH METAL WORKING

Airyolland, settlement, 62706

Metalworking slag

Aitnock, settlement, 41205

Over 50 hammerstones, two anvils (one of which worn), a whetstone and a slick stone

Ardeer, souterrain, 41069

Charcoal and slag

Ashgrove Loch, settlement, 41054

Unspecified amount of hammerstones

Black Loch of Myrton, settlement, 62815

A whetstone and 11 hammerstones

Boonies, settlement, 67818

Worn anvil in local greywacke, re-used as packing

Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702

Small lead ingot and assorted scrap metal

Carlingwarck, hoard, 64624

Four double-headed iron hammerheads of Early Iron Age type, only one of which is complete

Complete double headed iron hammerhead, with circular shaft hole, and three fragments from similar hammerheads

Roman iron adze hammer

Unfinished iron chisel

Castle Hill, settlement, 41199

25 hammerstones, eight polishers and an anvil

Coal Hill, settlement, 41013

Unspecified quantity of hammers and polishers

Dowalton Loch, ritual deposition locus/settlement, 63208

Iron hammer

Crucible

Iron slag

Dunagoil, settlement, 40291

Moulds for spear butts, of Late Iron Age Lisnachroger type and of Roman Iron Age door-butt type

Enterkinfoot, stray find, 46343

Mould for a wide-toothed comb or similar object of Early Historic date

Glenhead, settlement, 41053

Crucible fragments

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Seven whetstone fragments, likely associated with the pre-monastic settlement phase of the site

32.2 kg of diagnostic and undiagnostic slag (metalwork debris), from the pre-monastic period of the site

Two fragments from two distinct crucibles of unidentifiable original shape

Hammerstone with wear marks

Little Dunagoil, settlement, 40280

Unspecified amount of hammerstones, recovered from an Early Historic period layer

Fragment of a clay mould, from an Early Historic layer

Fragments of metal and iron slag, recovered in the Lower Enclosure area of the site

Mould fragment for a socketed axe

Lochspouts, settlement, 40831

Large numbers of hammerstones, polishing stones and whetstones, three stone funnels and hundreds of pebbles suitable for use as anvils, heating stones and other household activities

Mote of Mark, settlement, 64911

482 moulds fragments and 130 crucible fragments for penannular brooches (including an almost complete G type mould, and a casket mould decorated with style II interlace); and other assorted Early Historic moulds for other ornaments, some Christian in character, and utilitarian objects, including 27 moulds for pinheads and over 33 for pin shaft and a mould for axe-shaped snaffle bits. Most moulds have been found in association with their bone pinheads. Alloy analysis suggests preponderant use of

bronze, but at least two crucibles have shown traces of gold

Folded sheets of bronze

14 assorted objects and scrap in a copper alloy

Iron hearth cakes, billet, bars, and ingots

Possible touchstones for use in gold-smithing

Gold coil

Fragments from two whetstones

Rispaun Camp, settlement, 63122

Iron tongs of common Bronze Age design

Seamill, settlement, 40997

Hammerstone and whetstone

Sheet bronze

St. Blane's, monastery/graveyard, 40292

12 stone tools (including hammerstones, burnishers, whetstones and other)

Multi-purpose mould for ingots and circular objects

Fragments from two crucibles

Stevenston Sands, stray find, 41066

Unfinished unique bronze brooch, of crescent shape with flattened terminal horns, possibly of Roman Iron Age date

Teroy, settlement, 60815

Lump of iron (1 lb, 12 oz)

Torr a'Chaisteil, settlement, 39674

Several pieces of haematite iron

*ITEMS AND WASTE MATERIAL
ASSOCIATED WITH ANTLER, HORN,
BONE AND TOOTH WORKING*

Aitnock, settlement, 41025

Worked and unworked fragments of burnt animal bone

Ashgrove Loch. Settlement, 42054

Unspecified amount of bone chisels

Bone knife

Bone spoon

Two bone needles

Castle Hill, settlement, 41199

Jewellery in cannel coal, including two bracelets, a disc and a ring fragment, together with another item discarded or lost during production

Worked and unworked barite and keel

Little Dunagoil, settlement, 40280

Two unfinished antler tools from an Early Historic layer

Wastage from the production of bone tools, found in the cave area of the site

St. Blane's, monastery/graveyard, 40292

Red deer and roe deer antlers

*ITEMS AND WASTE MATERIAL
ASSOCIATED WITH THE
MANUFACTURE OF POTTERY VESSELS*
Crawthat Cottage, settlement, 67227

Pebble glazed with a whitish buff

*ITEMS AND WASTE MATERIAL
ASSOCIATED WITH THE
MANUFACTURE OF GLASS ITEMS*
Castle Hill, settlement, 41199

Yellow pipe beads and associated slag, and additional pipe bead of undescribed colour

*ITEMS AND WASTE MATERIAL
ASSOCIATED WITH THE
MANUFACTURE OF STONE ITEMS*
Castle Hill, settlement, 41199

Jewellery in cannel coal, including two bracelets, a disc and a ring fragment, together with another item discarded or lost during production

Worked and unworked barite and keel

Inchmarnock, settlement/monastery, 40268; 300171; 300178

19 assorted pieces related to shale bangles manufacture, ranging from debris to rough-out to near-ready pieces

Undiagnostic fragments of shale

Little Dunagoil, settlement, 40280

Two pieces, one of which worked, of green stone, probably from Arran, from an Early Historic layer

Lignite fragments, one of which shows traces of work, from the cave area of the site

Three fragments of an unfinished stone ring, found in the Lower Enclosure area of the site

Worked fragments and unfinished lignite rings found in the Lower Enclosure area of the site

Lochspouts, settlement, 40831

Worked and unworked rings of lignite and channel coal, found in association with 10 wooden pins

Mote of Mark, settlement, 64911

Raw jet

Unworked Ayrshire shale or lignite

Unfinished globular jet bead

St. Blane's, monastery/graveyard, 40292

Jet and cannel coal armlets and rings in varying stages of production

*ITEMS THE FUNCTION OR
IDENTIFICATION OF WHICH IS
UNKNOWN OR UNCERTAIN*

Airyolland, settlement, 62706

Worked coarse stone

Aitnock, settlement, 41205

Iron implement

Stone implement

Stone disc

Beattock, settlement, 48406

Iron implement

Black Loch of Myrton, settlement, 62815

Water-worn sandstone pebble

Boonies, settlement, 67818

Stone implement

Brighthouse Bay, midden, 84040

Tube-like implement in a copper alloy

Carghidown Castle, settlement, 63132

Chipped stone tools

Carlingwarck, hoard, 64624

Two iron tools of presumed Roman make

Fragment of several unidentifiable (too small and/or too worn) items

Coal Hill, settlement, 41013

Rusted iron tool

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Vitrified cylindrical object made of pottery (plug?)

Kirkconnel, settlement, 67073

Iron implement

Little Dunagoil, settlement, 40280

Bone implement

Lochspouts, settlement, 40831

Two sharp cutting bone implements

Two heavily corroded iron implements

Lost pieces of bronze and brass, including wire and small thin plates

Semi-globular large piece of soft wood, ca. 18cm in diameter, with a shallow cavity along its surface

Miller's Cairn – Dowalton Loch, settlement, 62699

Small piece of bronze

Mote of Mark, settlement, 64911

Decorative glass plaque

Iron working tools (undescribed)

26 iron fragments

Rispain Camp, settlement, 63122

Three pieces of sandstone, two pecked and one flattened

Grooved stone

Two lost fragments, one of blue glass or enamel, the other of pale blue glass

Seamill, settlement, 40997

Roman (?) glass fragments

St. Blane's, monastery/graveyard, 40292

Slate with a peg hole, decorated with Celtic knotwork

Triangular slate, with Celtic knotworks and a letter/monogram terminating in an animal head

Two pieces of slate with animal decorations

Teroy, settlement, 60815

Perforated disc

Corroded iron implement

*ORGANIC MATERIAL***Aitnock, settlement, 41205**

Wheat grains found within a charred layer

Beattock, settlement, 48406

Animal bone remains

Castle Hill, settlement, 41199

Remains of ox, sheep/goat, pig, red-deer, horse and wolf/dog

Catacol, burial, 39784

Corroded iron bar

Clachan Ard, settlement, 40269

Kitchen midden, containing bones and shell

Inchmarnock, settlement/monastery, 40268; 300171; 300178

Charcoal, ash and organic residues from foodstuff

Little Dunagoil, settlement, 40280

Bone assemblage, with a predominance of mature bovine bones, followed by young sheep/goat, pig, red deer, rabbit and a single horse molar, possibly from a Roman Iron Age layer

Animal bones, mostly sheep/goat, with some bovine and red deer remains, and horse teeth from five different horses, recovered from an Early Historic layer

Mote of Mark, settlement, 64911

Bone assemblage, predominantly composed of bovine remains (no skulls were recovered), followed by pig and sheep/goat. No fish bones were found.

Rispain Camp, settlement, 63122

Bone assemblage, including cow, sheep/goat and pig remains

Seamill, settlement, 40997

Organic material (bones, charcoal, seashells and similar)

Teroy, settlement, 60815

Food residue (burnt ox bones and cockle shells)

Torr a'Chaisteil, settlement, 39674

Human and animal remains (undescribed)

Trusty's Hill, settlement, 63641

Animal bone assemblage, comprising cow, pig and sheep/goat remains

COINS

Aird, hoard, 60765

Lost hoard of approximately 50 coins, of which one was identified as a bronze coin of Constantine I (306 - 337 AD)

Aitnock, settlement, 41205

Denarius of Vespasian (69 – 79 AD)

Denarius of Hadrian (117 – 138 AD)

Two *denarii* of Antoninus Pius (138 – 161 AD)

Annan, Butts Street, stray find, 66464

Coin of Hadrian (117 – 138 AD)

Ardrossan, stray find, 41109

Alexandrian coin of Maximian (289 – 290 AD)

Ardstinchar Castle, stray find, 60961

Sestertius of Trajan or Hadrian (98 – 138 AD)

Auchenree, stray find, 60566

Very worn Roman coin, of first or second century AD date

Auldgirth, stray find, 65783

Dupondius or *as* of Marcus Aurelius (161 – 162 AD)

Ayr, stray find, 41818

Counterfeit or forgery of a *Domitian* *sestertius* (*terminus post quem* 81 – 96 AD)

Barlochan, stray find, 64874

Coin of Constantine (306 – 337 AD)

Brighthouse Bay, midden, 84040

Coin moulds for the production of counterfeit *denarii* made using original coins of AD 220 and 222

Broomholm, hoard, 67676

Four *denarii* of Nero (54 – 68 AD)

Two *denarii* of Vespasian (69 – 79 AD)

Denarius of Domitian (81 – 96 AD)

Buittle Castle, settlement, 65002

Two unidentified third-century coins

Ten coins of late 1st century AD date

Denarius of Tiberius (14 – 37 AD)

Denarius of Hadrian (117 – 138 AD)

Denarius of Commodus (177 – 192 AD)

Burnswarck, settlement, 72833; 72884; 72886; 72887; 85701; 85702

Denarius of Nero (54 – 68 AD)

Denarius of Vespasian (69 – 79 AD)

Two *denarii* of Trajan (98 – 117 AD)

Denarius of Domitian (81 – 96 AD)

Canonbie – Glebe, stray find, 67526

Coin of Nero (54 – 68 AD)

Carlesgill, stray find, 67610

Coin of 4th century AD date

Carronbridge, stray find, 65197

Coin of Antoninus Pius (138 – 161 AD)

Chapelheron, stray find, 63256

Sestertius of Faustina I (141 AD)

Cleughbrae, stray find, 66165

Alexandrian coin of Antoninus Pius (138 – 161 AD)

Crosshill, stray find, 41518

Alexandrian coin of Maximian (289 – 290 AD)

Dalreoch Hill, stray find, 61956

Worn *sestertius* of Antoninus Pius (138 – 161 AD)

Drumbuoy, stray find, 62194

Worn and currently lost coin of probable Antonine date (138 – 161 AD)

Drumdoch, stray find, 60556

Worn as of Drusu Nero (19 – 9 BC)

Fairly worn *sestertius* of Gordian III (238 – 244 AD)

Dumfries, stray find, 65580

Aureus of Trajan (98 – 117 AD)

Dumfries, stray find, 65584

Coin, unidentified

Dumfries – Birkhill, stray find, 65551

Stater of Bodvoc, Boduni tribe (Gloucestershire), of Mack type 395, probably used as brooch at some point. It is likely to be a modern collector's loss

Dumfries – Cleughbrae, stray find, 65616

Alexandrian coin of Antoninus Pius (138 – 161 AD)

Dumfries - River Nith, stray find, 65559

Aureus, possibly of Augustus (27 BC – 14 AD)

Dumfriesshire, stray find, 65579

Alexandrian coin of Claudius (41 – 54 AD)

Ecclefechan, stray find, 66676

Gold coin of Alexander the Great, likely to be a modern loss

Gallaberry, stray find, 333844

Denarius of Hadrian (117 – 138 AD)

Denarius of Antoninus Pius (138 – 161 AD)

Coin, possibly Antonine (138 – 161 AD)

Girvan, stray find, 62042

Sestertius of Antoninus Pius (138 – 161 AD)

Glenhead, settlement, 41053

Very worn *sestertius* of Sabina (128 – 138 AD)

Glenlochar House, stray find, 64680

Worn *denarius* of Trajan (98 – 117 AD)

Glenluce, stray find, 339349

Sestertius of uncertain emperor, probably of 1st or 2nd century AD date

Irvine House, stray find, 67711

Denarius of Antoninus Pius (138 – 161 AD)

Kirkcudbright – 2 Castle Bank, stray find, 64097

Antoninianus of Numerian Caesar (282 – 284 AD)

Kirkcudbright – Burgh Roods, stray find, 64099

Denarius of Vespasian (69 – 79 AD)

Kirkcudbright – High Street, Greengate, stray find, 64098

Brass of Constans II (641 – 668 AD)

Kirkhall drive, stray find, 41110

Follis of Constantine I, in poor conditions (306 – 337 AD)

Kirkton, stray find (possible association with a Roman fortification), 333896

Two *denarii* of Hadrian (117 – 138 AD)

Coin of Antoninus Pius (138 – 161 AD)

Dupondius of Domitian (81 – 96 AD)

Orichalcum dupondius or copper coin of uncertain emperor, probably of 1st or 2nd century AD date

Kirkton, stray find (possible association with a Roman fortification), 333901

Denarius of Sabina (117 – 138 AD)

Langholm – Wauchope Bridge, stray find, 67652*Aureus* of Otho (69 AD)**Largs, settlement (?), 41165**

Lost coin hoard (?), undated

Lochar Moss, hoard, 66157

15 or 16 coins, of which the only recorded survivor is a family coin of Fufius Calenus, dated to 82 BC

Lochside, stray find, 65598*Antoninianus* of Probus (276 – 282 AD)**Mains of Dhuloch, stray find, 60347**

Alexandrian coin of Gallienus (265 – 266 AD)

Mill of Buittle, stray find, 64991

Denarius of Tiberius (14 – 37 AD)

Denarius of Hadrian (117 – 138 AD)

Denarius of Commodus (180 – 193 AD)

Minnigaff Parish, stray find, 63448

Coin of Gallienus (258 – 268 AD)

Coin of Tetricus (271 – 274 AD)

Mouswald, stray find, 333843*Denarius* of Trajan (98 – 117 AD)*Denarius* of Hadrian (117 – 138 AD)**Newton Stewart Douglas House, stray find, 63443***As* of Trajan (98 – 117 AD)**Prestwick, stray find, 41674***Dupondius* or *as* of Vespasian (69 – 79 AD)**Prestwick, stray find, 41675**Alexandrian coin of *Tacitus* (275 – 276 AD)**Raeburnhead, stray find, 67112**Alexandrian coin of *Probus* (276 – 282 AD)**River Ken – Dalry, stray find, 64294**

Counterfeit or forgery of an *as* of Faustina (*terminus post quem* 141 AD)

River Luce, stray find, 61607

Brass of Constantius II (323 – 361 AD)

Saltcoats, stray find, 41106*Denarius* of Faustina (160 – 161 AD)**Shankfoot, stray find, 64590**

Coin of *Constantius Gallus*, minted at Constantinople (351 – 354 AD)

Slateheugh, stray find, 63108Worn *antonianus* of Gallienus (253 – 268 AD)

Worn *antonianus* of Tetricus II (270 – 273 AD)

Twynholm Parish, stray find, 63995

Brass coin of Crispus (317 – 326 AD)

Upper Corsock, hoard, 64713

Worn *Urbs Roma* coin, minted at Cyzicus (early fourth century AD)

Coin of Constantius II, minted at Constantinople (337 – 361 AD)

Whita Hill, hoard, 67659Five *sestertii* of Hadrian (117 – 138 AD)

Two *as* coins of Antoninus Pius (138 – 161 AD)

Sestertius, possibly of Antoninus Pius (138 – 161 AD)

As of early third century AD date

Coin of Constantius II (337 – 361 AD)

Whitehill, stray find, 65839

Brass coin of Valentinian (364 – 375 AD)

Wigtown, stray find, 63374

As of Hadrian (117 – 138 AD)

APPENDIX 3: GAZETTEER

Archwood Hill – 66231

Jones 1979, 3 – 4, 41 – 42; RCAHMS 1997, 121–122, 134, 136, 298

Beattock – 48406

Higham and Jones 1975, 30; RCAHMS 1997, 57, 121–123, 150–151, 297, 305

Bessie's Hill – 67235; 67299

RCAHMS 1997, 77, 79, 82, 84, 160, 163, 165, 298, 303; Halliday 2002, 101

Birrens Hill – 67229

RCAHMS 1920, 166 – 167; RCAHMS 1997, 149, 151, 155, 305, 316

Bladnoch – 318944

Chapman et al. 2011, 336

Boonies – 67818

Jobey 1975

Bower Hill – 40933

RCAHMS 1985, 10

Broats – 66981

Higham and Jones 1975, 33; RCAHMS 1997, 54–55, 305, 308

Buittle Castle – 65002

Penman 1995; Penman 1996; Penman and Cochrane 1997; Penman and Cochrane 1999a; Penman and Cochrane 1999b; Penman and Penman 2001; Penman and Penman 2002

Burnswark – 85700; 85701; 85702; 288362; 72884; 72885; 72886; 72887

Christison and Anderson 1899; MacDonald 1920; Collingwood 1925; Birley 1939; Davies 1972; Jobey 1978; Reid 2016; RCAHMS 1997, 4, 121–

126, 129–130, 136, 145, 153, 156, 161–168, 177, 179–182, 298, 309, 321; Campbell 2003

Calvertsholm – 66989

RCAHMS 1997, 49, 55 – 57, 143, 302, 308

Camp Hill – 64919

RCAHMS 1914, II: 150–151

Carlingwark – 64624

Affleck 1912; Piggot 1952

Carronbridge – 65197

Johnston et al. 1994

Castle O'er – 67376

Mercer 1985; RCAHMS 1997, 4–5, 47, 78–85, 126, 130, 153, 156–158, 161, 163–165, 167, 182, 185, 280–281, 298, 307, 327; Halliday 2002, 96–104

Castlehill – 41199

Smith 1918

Castlehill Point – 64891

RCAHMS 1914, II: 14

Coal Hill – 41013

Smith 1918

Court Hill – 64884

Coles 1892, 130–131

Craigie – 42857

MacKie 2007, 1306

Doon Castle – 60487

MacKie 2007, 1325 – 1326

Doon Ward – 63892

RCAHMS 1914, II: 270 – 271

Dornock – 67004

RCAHMS 1997, 55, 305

Dornock Mains – 67014

Jones 1979, 3; RCAHMS 1997, 134, 298

Drummore Castle – 63925

RCAHMS 1914, II: 121 – 122

Dumbarton Rock – 43376

Alcock 1975; Alcock and Alcock 1990; Ewart 1995; Ewart and Dunn 1997; Stewart and Ewart 2001; Ewart and Franklin 2002; Ewart and Franklin 2002; Radley 2004; Radley 2004; Shaw 2005a; Stewart 2005; Radley 2007; Ewart 2009; Fox 2011; Radley 2011

Dun Burgidale – 40300

Hewison 1893, 287–288; Geddes and Hale 2010, 25, 30

Dun Scalpsie – 40254

Hewison 1893, 282; Geddes and Hale 2010, 21, 25 – 26

Dunagoil – 40291

Mann 1914; Marshall 1915; Mann 1925; Harding 2004a; Geddes and Hale 2010, 3 – 4, 9, 22 – 27

Dunduff – 40936

RCAHMS 1985, 12

Durisdeer – 46377

Jones 2011, 193

Elizabeth's Isle – 42557

n/a

Eskdalemuir – 67285

Jobey 1971, 98, 100; RCAHMS 1997, 84, 149, 151, 305

Glenhead – 41053

Hendry 1968; Hendry 1969; Robertson 1970; Hendry 1972

Glenluce – 79047

Burnham et al. 2008, 278; Jones 2011, 217

Hangingshaw – 66221

Jones 2011, 221

Hecklegirth – 66995

Jones 1979, 3; RCAHMS 1997, 49, 305, 308

Hell's Hole – 48425

RCAHMS 1997, 66, 298

Hillhouse Plantation – 48334

Welsh 2004

Hoddum – 69504

Lowe 1991; RCAHMS 1997, 143, 186, 243, 245, 281 – 282, 310, 322

Holm Park – 60957

RCAHMS 1981, 15

Inchmarnock – 40268

Lowe 2008

Isle of Whithorn – 63098

RCAHMS 1912, 177; Radford 1955, 161–3; McCarthy 2008

Kilpatrick – 39637

Stevenson 1995, 162

King William's Battery – 63983

Coles 1891, 358–359

Kirkmadrine – 60441

Radford and Donaldson 1957; RCAHMS 1985, 28

Knoweside – 128025

n/a

Largizean – 40257

Geddes and Hale 2010, 15

Largs – 41165

n/a 1879, 107

Little Dunagoil – 40280

Marshall 1964; Harding 2004a;
Geddes and Hale 2010, 22 – 23, 25 –
26, 29 – 31

Lochbrowan – 118983

n/a

Longrow – 166464

n/a

Mid Dinduff – 81571

n/a

Middlegill – 48362

RCAHMS 1920, 81; RCAHMS 1997,
297

Mote of Mark – 64911

Curle 1914; Laing 1973a; Laing 1973c;
Longley 1979; Laing and Longley
2006; Welsh 2009

Nethertown of Almorness – 64912

Coles 1892, 128; RCAHMS 1914, II:
59 – 60

Newhall Farm – 67226

Jobey 1971, 48, 87 – 91; RCAHMS
1920, 205 – 206; RCAHMS 1997, 44,
121, 126, 137 – 138, 140, 144, 154,
297, 302, 305

Newland Hill – 67181

Jobey 1971, 87 fig.8; RCAHMS 1920,
205; RCAHMS 1997, 118, 141, 157,
299, 307

Over Rig – 67422

Mercer 1985

Raeburnfoot – 67274

Barbour 1897; Robertson 1960

Rispain Camp – 63122

Haggarty and Haggarty 1983

Seamill – 40997

Munro 1882b; Turner 2010

Shiel Burn – 67307

Jobey 1971, 87; RCAHMS 1997, 78,
84, 130, 138, 149, 151, 299

Springfield Hill – 65116

n/a

St. Blane – 40292

Anderson 1899; Laing, Laing, and
Longley 1998

Stairhaven – 62292

MacKie 2007, 1326 – 1327

Sundaywell – 65134

RCAHMS 1920, 56

Teroy – 60815

Curle 1912

Trusty's Hill – 63641

Thomas 1961; Cessford 1994; Toolis
and Bowles, in print

Ward Law – 66098

Jones 2011, 316 – 317

Ward Law – 66099

RCAHMS 1920, 24 – 25

Whithorn – 63098

Hill 1997

Woodfield – 66986

RCAHMS 1997, 54 – 55, 57, 299

BIBLIOGRAPHY

PRIMARY SOURCES

- Aneirin. 1969. *The Gododdin: The Oldest Scottish Poem*. Edited by K.H. Jackson. Edinburgh: Edinburgh University Press.
- Ammianus, Marcellinus. 1910. *Ammiani Marcellini Rerum Gestarum Libri Qui Supersunt*. Translated by C.U. Clark. 2 vols. Berolini: Apud Weidmannos.
- . 1986. *The Later Roman Empire: A.D. 354-378*. Translated by W. Hamilton. Harmondsworth: Penguin.
- Charles-Edwards, T. M., ed. 2006. *The Chronicle of Ireland*. Translated by T. M. Charles-Edwards. 2 vols. Translated Texts for Historians 44. Liverpool: Liverpool University Press.
- Dumville, D. N., ed. 2002. *Annales Cambriae, AD 682-954: Texts A-C in Parallel*. Cambridge: Department of Anglo-Saxon, Norse and Celtic, University of Cambridge.
- Forbes, A. P. 1874. *Lives of S. Ninian and S. Kentigern Compiled in the Twelfth Century and Edited from the Best MSS.* The Historians of Scotland: 5. Edinburgh: Edmonston and Douglas.
- Gildas. 1978. *The Ruin of Britain and Other Works*. Edited and translated by M. Winterbottom. Vol. 7. Arthurian Period Sources. London: Phillimore.
- . 2006. *De Excidio Britanniae or The Ruin of Britain*. Edited by H. Williams. Lampeter: Llanerch Press.
- Gordon, R. K., ed. 1942. *Anglo Saxon Poetry*. Everyman's Library 794. London: Dent & Sons.
- Gwynn, J. 1913. *Liber Ardmachanus. The Book of Armagh*. Dublin: Royal Irish Academy.
- Horsley, G. H. R., and S. Mitchell, eds. 2000. *The Inscriptions of Central Pisidia*. Inschriften Griechischer Städte Aus Kleinasien 57. Bonn: Dr. Rudolf Habelt GMBH.
- Jarman, A. O. H., ed. 1990. *Aneirin. Y Gododdin: Britain's Oldest Heroic Poem*. The Welsh Classics 3. Llandysul: Gomer Press.
- Pennar, M., ed. 1988. *Taliesin Poems*. Burnham-on-Sea: Llanerch Enterprises.
- Ptolemy, C. 1843. *Geographia*. Edited by C.F.A. Nobbe. Lipsia: Carolus Tauchnitius.
- Richmond, I. A., and O. G. S. Crawford. 1949. *The British Section of the Ravenna Cosmography*. Oxford: Society of Antiquaries of London.
- Rivet, A.L.F., and C. Smith. 1979. *The Place-Names of Roman Britain*. London: Batsford.
- Tacitus. 2006a. "Agricola." In *Agricola. Germania. Dialogus.*, translated by M. Hutton and W Peterson, 1–115. Cambridge and London: Harvard University Press.
- . 2006b. "Germania." In *Agricola. Germania. Dialogus.*, translated by M. Hutton and W Peterson, 127–228. Cambridge and London: Harvard University Press.
- Taliesin. 1968. *The Poems of Taliesin*. Edited by I. Williams. Translated by J. E. C. Williams. Mediaeval and Modern Welsh Series 3. Dublin: Dublin Institute for Advanced Studies.
- Wyatt, A.J., ed. 1925. *Beowulf with the Finnsburg Fragment*. Cambridge: Cambridge University Press.

SECONDARY WORKS

- Affleck, J. 1912. "Carlingwark Loch and Its Crannogs." *TDGNHAS*, II, 24: 235–40.
- Alcock, L. 1975. "A Multi-Disciplinary Chronology for Alt Clut, Castle Rock, Dumbarton." *PSAS* 107: 103–13.
- . 1992. "Message from the Dark Side of the Moon: Western and Northern Britain in the Age of Sutton Hoo." In *The Age of Sutton Hoo. The Seventh Century in North-Western Europe*, edited by M. Carver, 205–16. Woodbridge: Boydell Press.
- Alcock, L., and E. Alcock. 1990. "Reconnaissance Excavations on Early Historic Fortifications and Other Royal Sites in Scotland, 1974–84: 4, Excavations at Alt Glut, Clyde Rock, Strathclyde, 1974–75." *PSAS*, no. 120: 95–149.
- . 1993. *The Neighbours of the Picts: Angles, Britons and Scots at War and at Home*. Rosemarkie: Dornoch Press.
- Ammianus, Marcellinus. 1910. *Ammiani Marcellini Rerum Gestarum Libri Qui Supersunt*. Translated by C.U. Clark. 2 vols. Berolini: Apud Weidmannos.
- . 1986. *The Later Roman Empire: A.D. 354–378*. Translated by W. Hamilton. Harmondsworth: Penguin.
- Anderson, J. 1899. "Description of a Collection of Objects Found in Excavations at St Blane's Church, Bute, Exhibited by the Marquis of Bute." *PSAS* 34: 307–25.
- Anderson, M. O. 2011. *Kings and Kingship in Early Scotland*. Edinburgh: Birlinn.
- Ancirin. 1969. *The Gododdin: The Oldest Scottish Poem*. Edited by K.H. Jackson. Edinburgh: Edinburgh University Press.
- Armit, I. 1990. "Broch Building in Northern Scotland: The Context of Innovation." *World Archaeology* 21 (3): 435–45.
- . 1999. "The Abandonment of Souterrains: Evolution, Abandonment or Catastrophe?" *PSAS* 129: 577–96.
- Arsdell, R. D. Van. 1994. *The Coinage of the Dobunni. Money Supply and Coin Circulation in Dobunnic Territory*. Oxford: Oxford University Committee for Archaeology.
- Baird, W. J. 2005. *The Scenery of Scotland. The Structure beneath*. Edinburgh: NMS.
- Bannerman, J. 1974. *Studies in the History of Dalriada*. Edinburgh: Scottish Academic Press.
- Barbour, J. 1897. "Excavations at Raeburnfoot, Eskdalemuir." *TDGNHAS*, II, 14: 17–27.
- . 1902. "Notice of the Excavation of the Camp or Earthwork at Rispa in Wigtownshire." *PSAS* 36: 621–26.
- Barnes, T. 1996. "Oppressor, Persecutor, Usurper. The Meaning of 'Tyrannus' in the Fourth Century." In *Historia Augustae Colloquium Barcinonenses*, edited by G. Bonamente and M. Mayer, 55–65. Bari: Edipuglia.
- Beaston, L. 2011. "The Ruin and the Brevity of Human Life." *Neophilologus* 95: 477–89.
- Berggren, J. L., and A. Jones. 2000. *Ptolemy's Geography: An Annotated Translation of the Theoretical Chapters*. Princeton: Princeton University Press.
- Bernhardt, J.W. 1999. *Itinerant Kingship and Royal Monasteries in Early Medieval Germany, c.936–1075*. Cambridge Studies in Medieval Life and Thought, 4th Ser. 21. Cambridge: Cambridge University Press.
- Binford, L.R. 1964. "A Consideration of Archaeological Research Design." *American Antiquity* 29 (4): 425–41.
- . 1965. "Archaeological Systematics and the Study of Culture Process." *American Antiquity* 31 (2, Part 1): 203–10.
- Birley, A. 1981. *The Fasti of Roman Britain*. Oxford: Clarendon Press.
- . 2002. *Garrison Life at Vindolanda: A Band of Brothers*. Stroud: Tempus.

- . 2009. "The Agricola." In *The Cambridge Companion to Tacitus*, edited by A.J. Woodman, 47–58. Cambridge: Cambridge University Press.
- Birley, E. 1939. "Burnswark." *Archaeological Journal* 96: 315–17.
- Black, G. F. 1887. "The Ancient Lake Dwellings of Scotland." *TDGNHAS*, II, 4: 94–95.
- Blake, E. 2001. "Constructing a Nuragic Locale: The Spatial Relationship between Tombs and Towers in Bronze Age Sardinia." *American Journal of Archaeology* 105 (2): 145–61.
- Boatwright, M.T., D.J. Gargola, and R.J.A. Talbert. 2004. *The Romans. From Village to Empire. A History of Ancient Rome from Earliest Times to Constantine*. New York and Oxford: Oxford University Press.
- Boozer, A.L. 2013. "Frontiers and Borderlands in Imperial Perspectives: Exploring Rome's Egyptian Frontier." *American Journal of Archaeology* 117 (2): 275–92.
- Bourdieu, P. 2004. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bowlus, C. R. 2002. "Ethnogenesis: The Tyranny of a Concept." In *On Barbarian Identity: Critical Approaches to Ethnicity in the Early Middle Ages*, edited by A. Gillet, 241–56. Studies in the Early Middle Ages 4. York: Brepols.
- Bradford, J. 1947. "A Technique for the Study of Centuriation." *Antiquity* 21 (84): 197–204.
- Bradley, R. 2012. *The Idea of Order. The Circular Archetype in Prehistoric Europe*. Oxford: Oxford University Press.
- Brandt, R., and J. Slofstra, eds. 1983. *Roman and Native in the Low Countries: Spheres of Interaction*. International Series 184. Oxford: BAR.
- Brather, S. 2002. "Ethnic Identities as Constructions of Archaeology: The Case of the Alamanni." In *On Barbarian Identity: Critical Approaches to Ethnicity in the Early Middle Ages*, edited by A. Gillet, 149–75. Studies in the Early Middle Ages 4. York: Brepols.
- Breeze, D. J., and B. Dobson. 1985. "Roman Military Deployment in North England." *Britannia* 16: 1–19. <https://doi.org/10.2307/526389>.
- Breeze, D. J., L. M. Thoms, and D. W. Hall, eds. 2009. *First Contact: Rome and Northern Britain*. Perth: Tayside and Fife Archaeological Committee.
- Brophy, K. 2016. *Reading Between the Lines. The Neolithic Cursus Monuments of Scotland*. London & New York: Routledge.
- Bruck, J. 1999. "Houses, Lifecycles and Depositions on Middle Bronze Age Settlements in Southern England." *Proceeding of the Prehistoric Society* 65: 145–66.
- Brughmans, T., S. J. Keay, and G. Earl. 2015. "Understanding Inter-Settlement Visibility in Iron Age and Roman Southern Spain with Exponential Random Graph Models for Visibility Networks." *Journal of Archaeological Methodology and Theory* 22: 58–143.
- Bruun, C. 2012. "La Mancanze Di Prove Di Un Effetto Catastrofico Della 'Peste Antonina'." In *L'Impatto Dell "Peste Antonina"*, edited by E. Lo Cascio, 123–65. Bari: Edipuglia.
- Büntgen, U., W.S. Myglan, F.C. Ljungqvist, M. McCormick, and N. Di Cosmo. 2016. "Cooling and Societal Change During the Late Antique Little Ice Age from 536 to around 660 AD." *Nature Geosciences* 9: 231–37.
- Burnham, B.C., F. Hunter, P. Booth, S. Worrell, and R.S.O. Tomlin. 2008. "Roman Britain in 2007." *Britannia* 39: 263–390.
- Bushe-Fox, J.P. 1913. "The Use of Samian Pottery in Dating the Early Roman Occupation of the North of Britain." *Archaeologia* LXIV: 295–314.
- Campbell, D.B. 2003. "The Roman Siege of Burnswark." *Britannia* 34: 19–33.
- Campbell, E. 2001. "Were the Scots Irish?" *Antiquity* 75 (288): 285–92.

- . 2007. *Continental and Mediterranean Imports to Atlantic Britain and Ireland, AD 400-800*. CBA Research Report 157. York: Council for British Archaeology.
- Campbell, Ewan. 2007. *Continental and Mediterranean Imports to Atlantic Britain and Ireland, AD 400-800*. CBA Research Report 157. York: Council for British Archaeology.
- Cartwright, N. 2015. "Scientific Models versus Social Reality." *Building Research and Information*, September, 1–4.
- Cascio, E. Lo. 2012. *L'impatto Della "Peste Antonina"*. Bari: Edipuglia.
- Castiglioni, L., and S. Mariotti. 1996. *IL Vocabolario Della Lingua Latina*. 3rd ed. Milano: Loescher.
- Cavers, G. 2008. "The Later Prehistory of 'Black Holes': Regionality and the South-West Scottish Iron Age." *PSAS* 138: 13–26.
- . 2010. *Crannogs and Later Prehistoric Settlement in Western Scotland*. BAR British Series 510. Oxford: Archaeopress.
- Cessford, C. 1994. "Pictish Raiders at Trusty's Hill?" *TDGNHAS*, III, 69: 81–88.
- Chalmers, G. 1887. *Caledonia*. Vol. 1. Paisley: Alexander Gardner.
- Chapman, E.C., F. Hunter, P. Booth, P. Wilson, S. Worrell, R.S.O. Tomlin, and J. Pearce. 2011. "Roman Britain in 2010." *Britannia* 42: 319–466.
- Charles-Edwards, T. M., ed. 2006. *The Chronicle of Ireland*. Translated by T. M. Charles-Edwards. 2 vols. Translated Texts for Historians 44. Liverpool: Liverpool University Press.
- . 2009. "Social Structure." In *A Companion to the Early Middle Ages: Britain and Ireland c.500-1100*, edited by P. Stafford, 107–25. Blackwell Companions to British History. Oxford: Wiley-Blackwell.
- Chase, A.S.Z., D.Z. Chase, and A.F. Chase. 2017. "LiDAR for Archaeological Research and the Study of Historical Landscapes." In *Sensing the Past*, edited by N. Masini and F. Soldovieri, 16:89–100. Geotechnologies and the Environment. Cham: Springer International Publishing.
- Childe, V.G. 1940. *Prehistoric Scotland*. London: Bell.
- Christison, B., and D.J. Anderson. 1899. "Account of the Excavation of the Camps and Earthworks at Birrenswark Hill, in Annandale, Undertaken by the Society in 1898." *PSAS* 33: 198–218.
- Claessen, H.J.M. 1983. "Kinship, Chieftdom and Reciprocity - on the Use of Anthropological Concepts in Archaeology." In *Roman and Native in the Low Countries: Spheres of Interaction*, edited by R. Brandt and J. Slofstra. BAR International Series 184. Oxford: B.A.R.
- Clarke, D. 1972. *Models in Archaeology*. London: Methuen.
- Clarke, D.L. 1973. "Archaeology: The Loss of Innocence." *Antiquity* 46 (185): 6–18.
- Clarke, D.L., A. Blackwell, and M. Goldberg. 2012. *Early Medieval Scotland. Individuals, Communities and Ideas*. Edinburgh: NMS.
- Clarke, J. 1947. "Report on Excavation at Tassieholm (Milton), Beattock, during 1946." *TDGNHAS*, III, 24: 100–110.
- . 1948. "The Forts at Milton, near Beattock (Tassieholm)." *TDGNHAS*, III, 25: 10–26.
- . 1949. "Excavations at Milton." *TDGNHAS*, III, 26: 133–49.
- . 1950. "The Roman Forts at Milton (Tassieholm) near Beattock, Dumfriesshire." *TDGNHAS*, III, 27: 197–201.
- . 1951. "Excavations at Milton (Tassieholm) in Season 1950." *TDGNHAS*, III, , no. 28: 199–221.
- . 1961. "Letter and Report of Excavation." RCAHMS.

- Clarkson, T. J. 2008. *The Picts: A History*. Stroud: Tempus.
- Clavel-Léveque, M. 1983. *Cadastrés et Espace Rural: Approches et Réalités Antiques. Table Ronde de Besançon, Mai 1980*. Paris: CNRS éditions.
- Coles, F.R. 1891. "The Motes, Forts and Doons of the Stewartry of Kirkcudbrightshire (Part I)." *PSAS* 25: 352–96.
- . 1892. "The Motes, Forts and Doons of the Stewartry of Kirkcudbrightshire (Part II)." *PSAS* 26: 117–70.
- Collingwood, R.G. 1925. "Burnswark Reconsidered." *TDGNHAS*, III, 13: 46–58.
- Collins, R. 2012. *Hadrian's Wall and the End of Empire. The Roman Frontier in the 4th and 5th Centuries*. London and New York: Routledge.
- Cook, M. 1999. "Aird Quarry (Inch Parish), Roundhouse and Enclosure." *Discovery Excavation Scotland*, 23.
- . 2002. "Aird Quarry, Stranraer, Dumfries and Galloway (Inch Parish), Palisaded Enclosure; Roundhouse" 3: 29.
- . 2005. "Main Street, Beattock (Kirkpatrick-Juxta Parish), Evaluation." *Discovery Excavation Scotland* 6: 45.
- . 2011. "New Evidence for the Activities of Pictish Potentates in Aberdeenshire: The Hillforts of Strathdon." *PSAS* 141: 207–29.
- Cormack, W.F. 1962. "Shillahill." *Discovery Excavation Scotland*, 27.
- Cowley, D.C. 2011. "Remote Sensing for Archaeology and Heritage Management - Site Discovery, Interpretation and Registration." In *Remote Sensing for Archaeological Heritage Management*, edited by D.C. Cowley, 43–58. Occasional Papers 5. Brussel: European Archaeological Concilium.
- Crawford, D.H. 2007. *Deadly Companions. How Microbes Shaped Our History*. Oxford: Oxford University Press.
- Crielaard, J.P. 2009. "The Ionians in the Archaic Period. Shifting Identities in a Changing World." In *Ethnic Constructs in Antiquity. The Role of Power and Tradition*, edited by T. Derks and N. Roymans, 37–84. Amsterdam Archaeological Studies 13. Amsterdam: Amsterdam University Press.
- Crow, J. 2007. "The Roman Frontier of Britain from Trajan to Antoninus Pius: Roman Builders and Native Britons." In *A Companion to Roman Britain*, edited by M. Todd, 114–33. Blackwell Companions to British History. Oxford: Blackwell.
- Crummy, N. 1983. *The Roman Small Finds from Excavations in Colchester 1971-9*. Colchester Archaeological Report 2. Colchester: Colchester Archaeological Trust.
- Cunliffe, B. 2003. *The Celts. A Very Short Introduction*. Very Short Introductions 94. Oxford: Oxford University Press.
- . 2007. "Britain and the Continent: Networks of Interaction." In *A Companion to Roman Britain*, edited by M. Todd, 1–11. Blackwell Companions to British History. Oxford: Blackwell.
- . 2013. *Britain Begins*. Oxford: Oxford University Press.
- . 2015. "Facing the Northern Ocean: The British Late Bronze Age and Iron Ages in Their Continental Perspective." In *Scotland In Later Prehistoric Europe*, edited by F. Hunter and I. B. M. Ralston, 5–18. Edinburgh: Society of Antiquaries of Scotland.
- Curle, A. O. 1912. "Account of the Excavation of a Broch near Craigcaffie, Inch Parish, Wigtownshire, Known as the Teroy Fort." *PSAS* 46: 183–88.
- . 1914. "Report on the Excavation in September 1913, of a Vitified Fort at Rockcliffe, Dalbeattie, Known as the Mote of Mark." *PSAS* 48: 125–68.
- . 1915. "Account of Excavations on Traprain Law in the Parish of Prestonkirk, County of Haddington, in 1914." *PSAS*, no. 49: 139–202.

- Curle, J. 1932. "An Inventory of Objects of Roman and Provincial Roman Origin Found on Sites in Scotland Not Definitely Associated with Roman Constructions." *PSAS* 66: 277–397.
- Dalton, G. 1981. "Anthropological Models in Archaeological Perspective." In *Pattern of the Past. Studies in Honour of David Clarke*, edited by I. Hodder, G. Isaac, and N. Hammond, 17–48. Cambridge: Cambridge University Press.
- Davies, R. W. 1972. "The Romans at Burnswark." *Historia: Zeitschrift Für Alte Geschichte* 21 (1): 99–113.
- Dobat, E. 2009. "The Gask 'System' in Perthshire: The First Artificial Frontier Line of the Roman Empire?" In *Breeze, D (ed) First Contact: Rome and Northern Britain*, 39–48. Perth: Tayside and Fife Archaeological Committee.
- Doherty, C. 2005. "Kingship in Early Ireland." In *The Kingship and Landscape of Tara*, edited by E. Bhreathnach, 3–31. Dublin: Four Courts for the Discovery Programme.
- Dooley, A. 2007. "The Plague and Its Consequences in Ireland." In *Plague and the End of Antiquity. The Pandemic of 541-750*, edited by L.K. Little, 215–28. Cambridge: Cambridge University Press.
- Driscoll, S. T., and K. Forsyth. 2004. "Historical Background." *Scottish Archaeological Journal* 26 (1-2): 4–20.
- Driscoll, S. T., J. Geddes, and M. A. Hall, eds. 2011. *Pictish Progress: New Studies on Northern Britain in the Middle Ages*. Vol. 50. Northern World. Leiden; Boston: Brill.
- Duggan, M. 2016. "Ceramic Imports to Britain and the Atlantic Seaboard in the Fifth Century and Beyond." *Internet Archaeology* 41.
- Dumville, D. N. 1977. "Kingship, Genealogies and Regnal Lists." In *Early Medieval Kingship*, edited by I.N. Wood and P.H. Sawyer, 72–104. Leeds.
- . , ed. 2002. *Annales Cambriae, AD 682-954: Texts A-C in Parallel*. Cambridge: Department of Anglo-Saxon, Norse and Celtic, University of Cambridge.
- Duncan, A.A.M. 1975. *Scotland: The Making of the Kingdom*. Vol. 1. The Edinburgh History of Scotland. Edinburgh: Oliver & Boyd.
- Duncan-Jones, R.P. 1996. "The Impact of the Antonine Plague." *Journal of Roman Archaeology* 9: 108–36.
- Elliot, C.P. 2016. "The Antonine Plague, Climate Change and Local Violence in Roman Egypt." *Past & Present* 231: 3–31.
- Erdrich, M., K. M. Giannotta, and W S Hanson. 2000. "Traprain Law: Native and Roman on the Northern Frontier." *PSAS* 130: 441–56.
- Esmonde Cleary, A.S. 2007. "Britain in the Fourth Century." In *A Companion to Roman Britain*, 409–27. Blackwell Companions to British History. Oxford: Blackwell.
- Ewart, G. 1995. "Dumbarton Castle (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, 76.
- . 2009. "Dumbarton Castle, West Dunbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 10: 178.
- Ewart, G., and A. Dunn. 1997. "Dumbarton Castle (Dumbarton Parish), Watching Brief and Excavation." *Discovery Excavation Scotland*, 82.
- Ewart, G., and J. Franklin. 2002. "Dumbarton Castle, West Dunbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 3: 116.
- Ezov, A. 1997. "The Numeri Exploratorum Units in the German Provinces and Raetia." *KLIO* 79 (1): 161–77.
- Feachem, R. 1951. "Dragonesque Fibulae." *Antiquaries Journal* 31: 32–44.
- Fenton, A. 1968. "Plough and Spade in Dumfries and Galloway." *TDGNHAS*, III, 45: 147–83.

- Fernández-Götz, M. 2014. *Identity and Power. The Transformation of Iron Age Societies in Northeast Gaul*. Amsterdam Archaeological Studies 21. Amsterdam: Amsterdam University Press.
- Fernández-Götz, M., and N. Roymans. 2015. "The Politics of Identity Late Iron Age Sanctuaries in the Rhineland." *Journal of the North Atlantic* 8: Debating the Thing in the North (Special Volume) (II: Selected Papers from Workshops Organized by the Assembly Project): 18–32.
- Fernando, A.G. 2013. "A Kingdom without a Capital? Itineration and Spaces of Royal Power in Castile, C. 1252-1350." *Journal of Medieval History* 39 (4): 456–76.
- Fields, N. 2005. *Rome's Northern Frontier AD 70-235: Beyond Hadrian's Wall*. Oxford: Osprey.
- Forbes, A. P. 1874. *Lives of S. Ninian and S. Kentigern Compiled in the Twelfth Century and Edited from the Best MSS*. The Historians of Scotland: 5. Edinburgh: Edmonston and Douglas.
- Forsyth, K. 2007. "The Latinus Stone: Whithorn's Earliest Christian Monument." In *St Ninian and the Earliest Christianity in Scotland*, edited by J. Murray, 19–42. BAR British Series 483. Oxford: Archaeopress.
- Fournie, D. 2004. "Harsh Lessons: Roman Intelligence in the Hannibalic War." *International Journal of Intelligence and CounterIntelligence* 17 (3): 502–38.
- Fox, P. 2011. "Dumbarton Castle, West Dunbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 12: 183.
- Fraser, J.E. 2005. "Strangers on the Clyde: Cenél Comgaill, Clyde Rock and the Bishops of Kingarth." *Innes Review* 56 (2): 102–20.
- . 2007. "St Columba and the Convention at Druimm Cete: Peace and Politics at Seventh-Century Iona." *Early Medieval Europe* 15 (3): 315–34.
- . 2009. *From Caledonia to Pictland. Scotland to 795*. Vol. 1. The New Edinburgh History of Scotland. Edinburgh: Edinburgh University Press.
- . 2010. "Early Medieval Europe: The Case of Britain and Ireland." In *The Oxford Handbook of Genocide Studies*, 259–79. Oxford Handbooks in History. Oxford: Oxford University Press.
<http://www.oxfordhandbooks.com.ezproxy.is.ed.ac.uk/view/10.1093/oxfordhb/9780199232116.001.0001/oxfordhb-9780199232116-e-14>.
- Fulford, M. 2007. "Economic Structures." In *A Companion to Roman Britain*, edited by M. Todd, 309–26. Blackwell Companions to British History. Oxford: Blackwell.
- Garcia-Moreno, A. 2013. "To See or to Be Seen... Is That the Question? An Evaluation of Palaeolithic Sites' Visual Presence and Their Role in Social Organization." *Journal of Anthropological Archaeology* 32: 647–58.
- Geddes, G., and A. Hale. 2010. *The Archaeological Landscape of Bute*. Edinburgh: RCAHMS.
- Gerrard, J. 2013. *The Ruin of Roman Britain - An Archeological Perspective*. Cambridge: Cambridge University Press.
- Gildas. 1978. *The Ruin of Britain and Other Works*. Edited and translated by M. Winterbottom. Vol. 7. Arthurian Period Sources. London: Phillimore.
- . 2006. *De Excidio Britanniae or The Ruin of Britain*. Edited by H. Williams. Lampeter: Llanerch Press.
- Giles, M. 2012. *A Forged Glamour*. Oxford: Windgather Press.
- Gillet, A. 2002. "Was Ethnicity Politicized in the Earliest Medieval Kingdoms?" In *On Barbarian Identity: Critical Approaches to Ethnicity in the Early Middle Ages*, edited by A. Gillet, 85–121. Studies in the Early Middle Ages 4. York: Brepols.

- Goetz, H. 2003. "Introduction." In *Regna and Gentes: The Relationship Between Late Antique and Early Medieval Peoples and Kingdoms in the Transformation of the Roman World*, edited by H. Goetz, J. Jarnut, and W. Pohl, 1–12. Transformation of the Roman World 13. Leiden and Boston: Brill.
- Goetz, H., J. Jarnut, and W. Pohl, eds. 2003. *Regna and Gentes. The Relationship between Late Antique and Early Medieval Peoples and Kingdoms in the Transformation of the Roman World*. Transformation of the Roman World 13. Leiden and Boston: Brill.
- Goldsworthy, A. 2007. "War." In *The Cambridge History of Greek and Roman Warfare*, edited by P. Sabin, H. van Wees, and M. Whitby, 76–121. Cambridge: Cambridge University Press.
- Gondek, M., and G. Noble. 2017. In *Life on the Edge: Social, Political and Religious Frontiers in Early Medieval Europe*, edited by S. Semple, C. Orsini, and S. Mui, 59–69. Neu Studien Zur Sachsenforschung Band 6. Braunschweig: Braunschweigisches Landesmuseum.
- Gordon, A. 1726. *Itinerarium Septentrionale*. London.
- Gordon, R. K., ed. 1942. *Anglo Saxon Poetry*. Everyman's Library 794. London: Dent & Sons.
- Graslund, B., and N. Price. 2012. "Twilight of the Gods? The 'Dust Veil Event' of AD 536 in Critical Perspective." *Antiquity* 86: 428–43.
- Grønlund Evers, K. 2011. *The Vindolanda Tablets and the Ancient Economy*. BAR British Series 544. Oxford: Archaeopress.
- Guido, M. 1974. "Notes and News. A Scottish Crannog Re-Dated." *Antiquity* 48 (189): 54–56.
- Gunn, J. 2000. *The Years Without Summer. Tracing A.D. 536 and Its Aftermath*. BAR 872. Oxford: BAR.
- Gwynn, J. 1913. *Liber Ardmachanus. The Book of Armagh*. Dublin: Royal Irish Academy.
- Haas, C. 2006. "La Peste Antonine." *Bull. Acad. Natle Méd* 190 (4-5): 1093–98.
- Haggarty, A., and G. Haggarty. 1983. "Excavations at Rispaan Camp, Whithorn, 1978–1981." *TDGNHAS*, III, 58: 21–51.
- Haldon, J. 2016. "Cooling and Societal Change." *Nature Geosciences* 9 (3): 191–92.
- Hall, J. 2014. "With Criminal Intent? Forgers at Work in Roman London." *Britannia* 45: 165–94.
- Halliday, S. 2002. "Settlement, Territory and Landscape: The Later Prehistoric Landscape in the Light of the Survey of Eastern Dumfriesshire." *TDGNHAS*, III, 76: 91–106.
- . 2013. "I Walked, I Saw, I Surveyed, but What Did I See?... and What Did I Survey?" In *Interpreting Archaeological Topography*, edited by R.S. Opitz and D.C. Cowley, 63–75. Oxford: Oxbow.
- Halsall, G. 2007. *Barbarian Migrations and the Roman West*. Cambridge: Cambridge University Press.
- . 2013. *Worlds of Arthur. Facts and Fictions of the Dark Ages*. Oxford: Oxford University Press.
- Hanson, W.S. 1991. *Agricola and the Conquest of the North*. London: Batsford.
- . 2007. "Scotland and the Northern Frontier." In *A Companion to Roman Britain*, edited by M. Todd, 136–61. Blackwell Companions to British History. Oxford: Blackwell.
- . 2009. "The Fort at Elginhaugh and Its Implications for Agricola's Role in the Conquest of Scotland." In *First Contact: Rome and Northern Britain*, edited by D. J. Breeze, 49–58. Perth: Tayside and Fife Archaeological Committee.

- . 2012. “Newstead and Roman Scotland: The Flavian to Antonine Periods.” In *A Roman Frontier Post and Its People. Newstead 1911 - 2011*, edited by F. Hunter and L.J.F. Keppie, 63–76. Edinburgh: NMS.
- Harbeck, M., L. Seifert, S. Hänsch, D.M. Wagner, and D. Birdsell. 2013. “Yersinia Pestis DNA from Skeletal Remains from the 6th Century AD Reveals Insights into Justinianic Plague.” *PLOS Pathogens* 9 (5): 1–8.
- Harding, D. W. 2004a. “Dunagoil, Bute, Re-Instated.” *Transactions of the Buteshire Natural History Society* XXVI: 1–19.
- . 2004b. *The Iron Age in Northern Britain*. London & New York: Routledge.
- . 2007. *The Archaeology of Celtic Art*. London and New York: Routledge.
- Haselgrove, C. 1987. *Iron Age Coinage in South-East England: The Archaeological Context*. 2 vols. BAR British Series 174. Oxford: B.A.R.
- . 2007. “Society and Polity in Late Iron Age Britain.” In *A Companion to Roman Britain*, edited by M. Todd, 12–29. Blackwell Companions to British History. Oxford: Blackwell Publishing.
- Haverfield, F. 1918. “Centuriation in Roman Britain.” *The English Historical Review* 33 (131): 289–96.
- Hays, J.N. 2007. “Historians and Epidemics. Simple Questions, Complex Answers.” In *Plague and the End of Antiquity. The Pandemic of 541-750*, edited by L.K. Little, 33–56. Cambridge: Cambridge University Press.
- Heather, P. 1994. “State Formation in Europe in the First Millennium A.D.” In *Scotland in Dark Age Europe*, edited by B. Crawford, 47–63. St Andrews: St John’s House Papers.
- Henderson, I. 1967. *The Picts*. New York and Washington: Frederick A. Praeger.
- Hendry, T.A. 1968. “Gourock Burn (Glenhead) Double Fort.” *Discovery Excavation Scotland*, 13.
- . 1969. “Gourock Burn, Double Fort.” *Discovery Excavation Scotland*, 12.
- . 1972. “Gourock Burn. Double Fort.” *Discovery Excavation Scotland*, 14–15.
- Hewison, Rev. J.K. 1893. “On the Prehistoric Forts of the Island of Bute.” *PSAS* 27: 281–93.
- Higham, N. J., and G.D.B Jones. 1975. “Frontiers, Forts and Farmers: Cumbrian Aerial Survey 1974-5.” *Archaeological Journal* 132 (1): 16–53.
- Hill, P. 1997. *Whithorn and St Ninian: The Excavation of a Monastic Town, 1984-91*. Stroud: Sutton Publishing for The Whithorn Trust.
- Hill, P., and D. R. Pollock. 1991. *The Whithorn Dig*. Whithorn: Whithorn Trust.
- Hill, P.H.C. 1982. “Broxmouth Hill-Fort Excavations, 1977-78: An Interim Report.” In *Later Prehistoric Settlements in South-East Scotland*, edited by D. W. Harding, 141–88. Department of Archaeology Occasional Paper 8. Edinburgh: University of Edinburgh.
- Hingley, R. 1992. “Society in Scotland from 700 BC to AD 200.” *PSAS*, no. 122: 7–53.
- . 2007. “Rural Settlement in Northern Britain.” In *A Companion to Roman Britain*, edited by M. Todd, 327–48. Blackwell Companions to British History. Oxford: Blackwell.
- Hodder, I. 1982. *Symbols in Action: Ethnoarchaeological Studies of Material Culture*. New Studies in Archaeology. Cambridge ; New York: Cambridge University Press.
- Hodges, R. 1982. *Dark Age Economics. The Origins of Towns and Trade AD 600 -1000*. London: Duckworth.
- . 2010. “Adriatic Sea-Trade in a European Perspective.” *Scottish Archaeological Journal* 32 (2): 95–119.

- Hodgson, N., J McKelvey, and W. Muncaster. 2012. *The Iron Age on the Northumberland Coastal Plain: Excavations in Advance of Development 2002-2010*. Tyne and Wear Archives & Museums Archaeological Monograph 3. Newcastle upon Tyne: TWM Archaeology.
- Horsley, G.H.R., and S. Mitchell, eds. 2000. *The Inscriptions of Central Pisidia*. Inschriften Griechischer Städte Aus Kleinasien 57. Bonn: Dr. Rudolf Habelt GMBH.
- Hunter, F. 1994. "Dowalton Loch Reconsidered." *TDGNHAS*, III, 69: 53–72.
- . 1997. "Iron Age Hoarding in Scotland and Northern England". In A. Gwilt and C. Haselgrove (eds.), *Re-constructing Iron Age Societies*. Oxford: Oxbow Monograph 71, 108–34.
- . 2007. *Beyond the Edge of the Empire: Caledonians, Picts and Romans*. Rosemarkie: Groam House Museum.
- Hunter, F., and L.J.F. Keppie. 2012. *A Roman Frontier Post and Its People: Newstead 1911-2011*. Edinburgh: NMS.
- Hunter, J. 1975. "Excavations at Ardeer, Ayrshire." *PSAS* 105: 296–300.
- Ingemark, D. 2003. "Glass, Alcohol and Power in Roman Iron Age Scotland. A Study of the Roman Vessel Glass from Non-Roman/native Sites in North Northumberland and Scotland". Unpublished PhD Thesis, Lund: Lund University - Department of Ancient History.
- . 2014. *Glass, Alcohol and Power in Roman Iron Age Scotland*. Edinburgh: NMS.
- Ingiyimbere, F.H. 2014. "St. Augustine and the Foundation of Just War Theory." *Journal of Catholic Social Thought* 11 (1): 179–202.
- Isaac, G. R. 2005. "Scotland." In *New Approaches to Celtic Place-Names in Ptolemy's Geography*, edited by J. de Hoz, E.R. Luján, and P. Sims-Williams, 189–214. Madrid: Ediciones Clásicas.
- Jankulak, K., and J. M. Wooding. 2007. *Ireland and Wales in the Middle Ages*. Dublin: Four Courts Press.
- Jarman, A. O. H., ed. 1990. *Aneirin. Y Gododdin: Britain's Oldest Heroic Poem*. The Welsh Classics 3. Llandysul: Gomer Press.
- Jobey, G. 1966. "Homesteads and Settlements in the Frontier Area." In *Rural Settlement in Roman Britain*, edited by C. Thomas, 1–14. CBA Research Report 7. London: Council for British Archaeology.
- . 1971. "Early Settlements in Eastern Dumfriesshire." *TDGNHAS* 48: 78–103.
- . 1975. "Excavations at Boonies, Wester Kirk, and the Nature of Romano-British Settlement in Eastern Dumfriesshire." *PSAS*, no. 105: 119–40.
- . 1978. "Burnswark Hill, Dumfriesshire." *TDGNHAS*, III, 53: 57–104.
- Johnston, D., L. Allason-Jones, S. Boardman, S. Carter, A. Clarke, B. Crone, M. Dalland, et al. 1994. "Carronbridge, Dumfries and Galloway: The Excavation of Bronze Age Cremations, Iron Age Settlements and a Roman Camp." *PSAS* 124: 233–91.
- Jones, B. 1979. "Aerial Reconnaissance, Solway Survey; Dumfries and Galloway 1977 to 1979." *Discovery Excavation Scotland*, 3–4.
- Jones, E. 2000. "Climate, Archaeology, History and the Arthurian Tradition: A Multiple-Source Study of Two Dark Age Puzzles." In *The Years Without Summer. Tracing A.D. 536 and Its Aftermath*, edited by J.D. Gunn, 25–34. BAR International Series 872. Oxford: BAR.
- Jones, G.D.B., and J. Walker. 1983. "Either Side of the Solway. Towards a Minimalist View of Romano-British Agricultural Settlement in the North-West." In *Settlements in North Britain 1000 BC - AD 1000*, edited by J.C. Chapman and H.C. Mytum, 185–204. BAR British Series 118. Oxford: BAR.

- Jones, R.H. 2011. *Roman Camps in Scotland*. Edinburgh: Society of Antiquaries of Scotland.
- Jones, S. 2007. "Discourses of Identity in the Interpretation of the Past." In *The Archaeology of Identities. A Reader*, edited by T. Insoll, 44–58. Oxon: Routledge.
- Judge, W., J. Ebert, and R. Hitchcock. 1979. "Sampling in Regional Archaeological Survey." In *Sampling in Archaeology*, edited by J.W. Mueller, 82–123. Tucson: University of Arizona Press.
- Karlsson, G. 1996. "Plague Without Rats: The Case of Fifteenth Century Iceland." *Journal of Medieval History* 22: 263–84.
- Kelly, F. 1988. *A Guide to Early Irish Law*. Dublin: Dublin Institute for Advanced Studies.
- Kelly, G. 2009. *Ammianus Marcellinus. The Allusive Historian*. Cambridge: Cambridge University Press.
- Kennedy, H.N. 2007. "Justinianic Plague in Syria and the Archaeological Evidence." In *Plague and the End of Antiquity. The Pandemic of 541-750*, edited by L.K. Little, 87–95. Cambridge: Cambridge University Press.
- Keppie, L.J.F. 1989a. "Beyond the Northern Frontier: Roman and Native in Scotland." In *Research on Roman Britain 1960-89*, edited by M. Todd, 61–73. London: Society for the Promotion of Roman Studies.
- . 1989b. "The Romans in Southern Scotland: Future Discoveries." *Glasgow Archaeological Journal* 16 (16): 1–27.
- . 2004. *The Legacy of Rome: Scotland's Roman Remains*. 3rd ed. Edinburgh: John Donald.
- Kilbride-Jones, H.E. 1937. "Glass Armlets in Britain." *PSAS*, no. 72 (1938): 366–95.
- Laing, L.R. 1973a. "Dalbeattie, Rockcliffe, Mote of Mark." *Discovery Excavation Scotland*, 32–34.
- . 1973b. "The Angles in Scotland and the Mote of Mark." *TDGNHAS*, III, 50: 37–52.
- . 1975. *The Archaeology of Late Celtic Britain and Ireland, c.400-1200 AD*. London: Methuen.
- . 2006. *The Archaeology of Celtic Britain and Ireland, C. AD 400-1200*. Cambridge: Cambridge University Press.
- Laing, L.R., J. Laing, and D. Longley. 1998. "The Early Christian and Later Medieval Ecclesiastical Site at St Blane's Kingarth, Bute." *PSAS* 128: 551–65.
- Laing, L.R., and D. Longley. 2006. *The Mote of Mark: A Dark Age Hillfort in South-West Scotland*. Oxford: Oxbow Books.
- Lamb, H. 1981. "Climate from 1000 BC to 1000 AD." In *The Environment of Man: The Iron Age to the Anglo-Saxon Period*, edited by M. Jones and G. Dimbleby, 53–66. BAR British Series 87. Oxford: BAR.
- Lane, A., and E. Campbell. 2001. *Dunadd: An Early Dalriadic Capital*. Oxford: Oxbow.
- Lapidge, M., and D. N. Dumville, eds. 1984. *Gildas. New Approaches*. Studies in Celtic History 5. Woodbridge: Boydell Press.
- Lenihan, D.A. 1996. "The Influence of Augustine's Just War: The Early Middle Ages." *Augustinian Studies* 27 (1): 55–94.
- Ligt, L. de, and L.E. Tacoma, eds. 2015. *Migration and Mobility in the Early Roman Empire*. Studies in Global Social History 23. Leiden and Boston: Brill.
- Little, L.K. 2007. "Life and Afterlife of the First Plague Pandemic." In *Plague and the End of Antiquity. The Pandemic of 541-750*, edited by L.K. Little, 3–32. Cambridge: Cambridge University Press.
- Longley, D. 1979. "Mote of Mark, Dalbeattie (Colvend and Southwick P), Hillfort." *Discovery Excavation Scotland*, 5–6.

- Lowe, C. 1991. "New Light on the Anglian 'Minster' at Hoddum." *TDGNHAS*, III, 66: 11–36.
- . 2008. *Inchmarnock. An Early Historic Island Monastery and Its Archaeological Landscape*. Edinburgh: Society of Antiquaries of Scotland.
- Mac Cana, P. 1973. "The Topos of the Single Sandal in Irish Tradition." *Celtica* 10: 160–66.
- MacArthur, W. P. 1949. "The Identification of Some Pestilences Recorded in the Irish Annals." *Irish Historical Studies* 6 (23): 169–88.
- MacDonald, G. 1935. "Two Inscribed Stones of Early Christian Period." *PSAS*, no. 70: 33–39.
- MacDonald, G. 1918. "Roman Coins Found in Scotland." *PSAS* 52: 203–76.
- . 1920. "Fortifications, Birrenswark or Burnswark." In *County of Dumfries*, edited by RCAHMS, 94–101. Edinburgh: RCAHMS.
- MacGregor, M. 1976. *Early Celtic Art in North Britain*. 2 vols. Leicester: Leicester University Press.
- Macinnes, L. 1984. "Brochs and the Roman Occupation of Lowland Scotland." *PSAS*, no. 114: 235–49.
- Mackie, E. W. 2002. *The Roundhouses, Brochs and Wheelhouses of Atlantic Scotland*. 3 vols. British Series 342. Oxford: BAR.
- Maddicott, J.R. 2007. "Plague in Seventh Century England." In *Plague and the End of Antiquity. The Pandemic of 541-750*, edited by L.K. Little, 171–214. Cambridge: Cambridge University Press.
- Mann, J. 1974. "The Northern Frontier After AD369." *Glasgow Archaeological Journal* 3: 34–42.
- Mann, L. M. 1914. "Report on Relics Discovered during Excavations in 1913 at Cave at Dunagoil, Bute and in 1914 at the Fort at Dunagoil, Bute (with Suggestions as to the Probable History and Chronology of the Site)." *Transactions of the Buteshire Natural History Society* 8: 61–86.
- . 1925. "Note on the Results of the Exporation of the Fort at Dunagoil." *Transactions of the Buteshire Natural History Society* 9: 54–60.
- Marshall, D. N. 1964. "Report on Excavations at Little Dunagoil." *Transactions of the Buteshire Natural History Society* XVI.
- Marshall, J. N. 1915. "Preliminary Notes on Some Excavations at Dunagoil Fort and Cave." *Transactions of the Buteshire Natural History Society* 8: 42–86.
- Maynard, D. J. 1993. "Brighthouse Bay Dune System (Borgue Parish): Shell Middens." *Discovery Excavation Scotland*, 21.
- Maynard, D. J., G. Boon, F. Hunter, A. Sheridan, and S. Rapson. 1994. "Archaeological Discoveries in the Dune System at Brighthouse Bay." *TDGNHAS*, III, 69: 13–34.
- McCarthy, D. 2008. *The Irish Annals. Their Genesys, Evolution and History*. Dublin: Four Courts Press.
- McCarthy, M. 2002a. "Rheghed: An Early Historic Kingdom near the Solway." *PSAS* 132: 357–81.
- . 2002b. *Roman Carlisle & the Lands of the Solway*. Stroud: Tempus.
- . 2008. "Isle Head Fort, Whithorn, Dumfries and Galloway (Whithorn Parish), Survey." *Discovery Excavation Scotland* 9: 55.
- McCormick, M. 2001. *Origins of the European Economy. Communications and Commerce A.D. 300 - 900*. Cambridge: Cambridge University Press.
- McLaren, D., and F. Hunter. 2008. "New Aspects of Rotary Querns in Scotland." *PSAS* 138: 105–28.

- McQ Holmes, N. M. 2014. "The Synton and Kippilaw Denarius Hoards: Further Numismatic Evidence for Late Antonine and Severan Scotland." *PSAS* 144: 133–67.
- McQ Holmes, N. M., and F. Hunter. 2001. "Roman Counterfeiters' Moulds from Scotland." *PSAS* 131: 167–76.
- McSparron, C., and B. Williams. 2011. "... and They Won Land amongst the Picts by Friendly Treaty or the Sword." *PSAS* 141: 145–58.
- Megaw, R., and V. Megaw. 1989. *Celtic Art. From Its Beginning to the Book of Kells*. London: Thames & Hudson.
- Mercer, R. J. 1985. "Over Rig Excavation and Field Survey, Eskdalemuir, Dumfriesshire, South West Scotland." *University of Edinburgh Department of Archaeology Annual Report*, no. 31: 19–22.
- Mercer, R. J., and R. Tipping. 1997. *Kirkpatrick Fleming, Dumfriesshire: An Anatomy of a Parish in South West Scotland*. The History and Archaeology of Kirkpatrick Fleming Parish 6. Dumfries: Dumfriesshire and Galloway Natural History and Antiquarian Society.
- Milcent, P.Y. 2009. "Le Passage de l'Âge Du Bronze À À l'Âge Du Fer En Gaule Au Miroir Des Élités Sociales: Une Crise VIIIe Siècle Av. J.-C.?" In *De L'âge Du Bronze À L'âge Du Fer En France et En Europe Occidentale (Xe–VIIe Siècle Av. J.-C.)*, *Actes Du XXXe Colloque International de l'A.F.E.A.F., Saint-Romain-En-Gal, 26–28 Mai 2006*, edited by M.J. Lambert-Roulière, A. Daubigney, P.Y. Milcent, M. Talon, and J. Vital. Dijon: A.F.E.A.F.
- Mintz, D. 2009. "The Hunt for the Lost Cities of Ptolemy." *BSHM Bulletin: Journal of the British Society for the History of Mathematics* 24 (1): 1–11.
- Mitchell, S. 1999. "Native Rebellion in the Pisidian Taurus." In *Organised Crime in Antiquity*, edited by K. Hopwood, 155–76. London: Duckworth.
- Mommsen, T. 1886. *Römische Geschichte*. Vol. 5. Berlin: Weidmann.
- Moscatti, S., E.A. Arslan, and D. Vitali, eds. 1991. *The Celts*. New York and London: Rizzoli ; Thames & Hudson.
- Munro, R. 1882a. *Ancient Scottish Lake-Dwellings or Crannogs: With a Supplementary Chapter on Remains of Lake-Dwellings in England*. Edinburgh: D. Douglas.
- . 1882b. "Notice of Excavations Made on an Ancient 'Fort' at Seamill, Ayrshire." *Archaeology and History Collection of Ayrshire and Wigtonshire* 3: 59–65.
- Murray, J. 2007. *St Ninian and the Earliest Christianity in Scotland*. BAR 483. Oxford: Archaeopress.
- n/a. 1879. *Guide to Wemyss Bay, Skelmorlie, Inverkip, Largs and Surrounding Districts*. Paisley.
- Newman, C. 1997. *Tara: An Archaeological Survey*. Discovery Program Monographs 2. Dublin: Royal Irish Academy.
- . 2005. "Re-Composing the Archaeological Landscape of Tara." In *The Kingship and Landscape of Tara*, edited by E. Bhreathnach, 361–409. Dublin: Four Courts for the Discovery Programme.
- Nicolet, C. 2001. "Il Cittadino, Il Politico." In *L'uomo Romano*, edited by A. Giardina, 1–44. Roma e Bari: Laterza.
- Noble, G., M. Gondek, E. Campbell, and M. Cook. 2013. "Between Prehistory and History: The Archaeological Detection of Social Change among the Picts." *Antiquity* 87: 1136–50.
- PAGES 2k Consortium. 2013. "Continental-Scale Temperature Variability during the Past Two Millennia." *Nature Geosciences* 6 (5): 339–46.

- Palet, J.M., and H. A. Orengo. 2011. "The Roman Centuriated Landscape: Conception, Genesis and Development as Inferred from the Ager Tarraconensis Case." *American Journal of Archaeology* 115 (3): 383–402.
- Patrick Fazioli, K. 2014. "A Multidisciplinary Approach to Medieval and Early Modern Land Use: A Case Study from Southeastern Austria." *Archaeological Prospection* 21 (4): 235–44.
- Penman, A. 1995. "Buittle Castle (Buittle Parish), Early Medieval Bailey Adjacent to Motte, Now Known to Also Be an Earlier Prehistoric Site." *Discovery Excavation Scotland*, 21.
- . 1996. "Botel Castle Bailey (Buittle Castle) (Buittle Parish), Early Medieval Bailey, Multi-Period Site." *Discovery Excavation Scotland*, 28–29.
- Penman, A., and E. Cochrane. 1997. "Botel Castle bailey/Buittle Castle (Buittle Parish), Prehistoric Site and Early Medieval Bailey." *Discovery Excavation Scotland*, 24.
- . 1999a. "Botel Bailey, Dumfries and Galloway (Buittle Parish), Multi-Period Settlement within Castle Bailey." *Discovery Excavation Scotland* 1: 19–20.
- . 1999b. "Botel Castle Bailey (Buittle Parish), Early Medieval Bailey, Prehistoric Site." *Discovery Excavation Scotland*, 21–23.
- Penman, A., and E. J. Penman. 2001. "Botel Bailey and Fosse, Dumfries and Galloway (Buittle Parish, Multi-Period Settlement within Castle Bailey." *Discovery Excavation Scotland* 2: 26.
- . 2002. "Bailey of Buittle Castle, Dumfries and Galloway (Buittle Parish), Medieval Castle Courtyard." *Discovery Excavation Scotland* 3: 27–28.
- Pennar, M., ed. 1988. *Taliesin Poems*. Burnham-on-Sea: Llanerch Enterprises.
- Peterson, J. W. M. 1990. "Roman Cadastres in Britain. II. Eastern A. Signs of a Large System in the Northern English Home Counties." *Dialogues D'histoire Ancienne* 16 (2): 233–72.
- . 1995. "Flavian Fort Sites in South Wales: A Spreadsheet Analysis." In *Computer Applications and Quantitative Methods in Archaeology 1994*, edited by J. Nugget and N. Ryan, 87–93. BAR International Series 600. Oxford: Tempus Reparatum.
- . 2006. "Planned Military Landscape in Roman Britain." In *Journeys through European Landscapes*, edited by L. et al. Lèveque, 153–56. Ponferrada, Spain: COST Action A27. <http://www.uea.ac.uk/~jwmp/PMLinRB/PMLinRB.html>.
- Petts, D. 2003. *Christianity in Roman Britain*. Stroud: Tempus.
- Pickin, J. 2004. "Bog Bodies from Dumfries and Galloway." *TDGNHAS*, III, 78: 31–36.
- Pickin, J., and F. Hunter. 2008. "Tonderghie Mine, Dumfries and Galloway (Whithorn Parish), Survey." *Discovery Excavation Scotland*, New Series, 9: 55.
- Piggott, S. 1950. "Swords and Scabbards of the British Early Iron Age." *Proceeding of the Prehistoric Society* 16: 1–28.
- . 1952. "Three Metal-Work Hoards of the Roman Period from Southern Scotland." *PSAS* 87: 1–52.
- . 1966. "A Scheme for the Scottish Iron Age." In *The Iron Age in Northern Britain*, edited by A.L.F. Rivet, 1–15. Edinburgh: Edinburgh University Press.
- Piggott, C.M. 1948. "Excavations at Hownam Rings, Roxburghshire." *PSAS* 82: 45–67.
- Plog, S. 1976. "Relative Efficiency of Sampling Techniques for Archaeological Surveys." In *The Early Mesoamerican Village*, edited by K. Flannery, 136–62. New York and London: Academic Press.
- Ptolemy, C. 1843. *Geographia*. Edited by C.F.A. Nobbe. Lipsia: Carolus Tauchnitius.
- Puget, J., and J. B. Sanville. 2000. "Social Reality." *International Journal of Psychoanalysis* 81: 998–1000.

- Radford, C. A. R. 1955. "Excavations at Whithorn (final Report)." *TDGNHAS*, 3rd, 34: 131–94.
- Radford, C. A. R., and G. Donaldson. 1957. *Whithorn and Kirkmadrine*. Edinburgh: His Majesty's Stationery Office.
- Radley, A. 2004. "Dumbarton Castle (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 5: 130–31.
- . 2007. "Dumbarton Castle - French Prison, West Dumbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland* 8: 191.
- . 2011. "Dumbarton Castle - Spur Batter, West Dumbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 12: 183.
- Rao, R. 2015. *I Paesaggi dell'Italia Medievale*. Roma: Carrocci Editore.
- RCAHMS. 1912. *The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland. Fourth Report and Inventory of Monuments and Constructions in Galloway*. Edinburgh: RCAHMS.
- . 1914. *The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland. Fifth Report and Inventory of Monuments and Constructions in Galloway*. Vol. II. Edinburgh: RCAHMS.
- . 1920. *Seventh Report with Inventory of Monuments and Construction in the County of Dumfries*. Edinburgh: RCAHMS.
- . 1956. *An Inventory of the Ancient and Historical Monuments of Roxburghshire*. 2 vols. Edinburgh: H.M.S.O.
- . 1981. *The Royal Commission on the Ancient and Historical Monuments of Scotland. The Archaeological Sites and Monuments of South Carrick, Kyle and Carrick District, Strathclyde Region*. 14. Edinburgh: RCAHMS.
- . 1985. *The Royal Commission on the Ancient and Historical Monuments of Scotland. The Archaeological Sites and Monuments of South Carrick, Kyle and Carrick District, Strathclyde Region*. The Archaeological Sites and Monuments of Scotland 25. Edinburgh: RCAHMS.
- . 1997. *Eastern Dumfriesshire. An Archaeological Landscape*. Edinburgh: The Stationery Office.
- Reece, R. 1995. "Site-Find in Roman Britain." *Britannia* XXVI: 179–206.
- Reid, J. 2016. "Bullets, Ballistas, and Burnswark. A Roman Assault on a Hillfort in Scotland." *Current Archaeology* XXVII (4): 20–26.
- Reid, J.E. 1864. *History of the County of Bute and Families Connected Therewith*. Glasgow; Edinburgh.
- Richmond, I.A. 1968. *Excavations Carried out between 1951 and 1958: For the Trustees of the British Museum*. 2 vols. London: Trustees of the British Museum.
- Richmond, I.A., and O.G.S. Crawford. 1949. *The British Section of the Ravenna Cosmography*. Oxford: Society of Antiquaries of London.
- Rivet, A.L.F., and C. Smith. 1979. *The Place-Names of Roman Britain*. London: Batsford.
- Robb, G. 2013. *The Ancient Paths. Discovering the Lost Map of Celtic Europe*. London: Picador.
- Roberts, B.W., D. Boughton, M. Dinwiddy, N. Doshi, A.P. Fitzpatrick, D. Hook, N. Meeks, A. Mongiatti, A. Woodward, and P.J. Woodward. 2015. "Collapsing Commodities or Lavish Offerings? Understanding Massive Metalwork Deposition at Langton Matravers, Dorset During the Bronze Age–Iron Age Transition." *Oxford Journal of Archaeology* 34 (4): 365–95.
- Robertson, A. 1970. "Roman Finds from Non-Roman Sites in Scotland: More Roman 'Drift' in Caledonia." *Britannia* 1: 198–226.
- . 1974. "Roman Coins Found in Scotland, 1961–70." *PSAS* 103: 113–68.

- . 1983. "Roman Coins Found in Scotland, 1971-82." *PSAS* 113: 405–48.
- Robertson, A. S. 1960. "Excavations at Raeburnfoot, Eskdalemuir, 1959-60." *TDGNHAS*, III, 39: 24–49.
- . 1975. *Birrens (Blatobulgium)*. Glasgow: Dumfriesshire and Galloway Natural History and Antiquarian Society.
- Robinson, D., and J. Dickson. 1988. "Vegetational History and Land Use: A Radiocarbon-Dated Pollen Diagram from Machrie Moor, Arran, Scotland." *New Phytology* 109: 223–51.
- Romankiewicz, T. 2016. "Land, Stone, Trees, Identity, Ambition: The Building Blocks of Brochs." *Archaeological Journal* 173 (1): 1–29.
- Romano, D.G. 2003. "City Planning, Centuriation, and Land Division in Roman Corinth: Colonia Laus Iulia Corinthiensis & Colonia Iulia Flavia Augusta Corinthiensis." *Corinth* 20, Corinth, The Centenary: 1896-1996: 279–301.
- Roselaar, S. T. 2015. "State-Organised Mobility in the Roman Empire: Legionaries and Auxiliares." In *Migration and Mobility in the Early Roman Empire*, edited by L. de Ligt and L.E. Tacoma, 138–57. Studies in Global Social History 23. Leiden and Boston: Brill.
- Rua, H., A.B. Gonçalves, and R. Figueiredo. 2013. "Assessment of the Lines of Torres Vedras Defensive System with Visibility Analysis." *Journal of Archaeological Science* 40: 2113–23.
- Rucco, A.A. 2015. "Dalle 'Carte' Alla Terra. Il Paesaggio Comacchiese Nell'alto Medioevo." *Reti Medievali Rivista* 16 (2): 197–229.
- Sahlins, M.D., and E.R. Service, eds. 1970. *Evolution and Culture*. Ann Arbor: The University of Michigan Press.
- Sallares, R. 2007. "Ecology, Evolution and Epidemiology of Plague." In *Plague and the End of Antiquity. The Pandemic of 541-750*, edited by L.K. Little, 231–89. Cambridge: Cambridge University Press.
- Sarris, P. 2002. "The Justinianic Plague: Origins and Effects." *Continuity and Change* 17 (2): 169–82.
- ScARF. 2012. *Medieval Scotland: A Future for Its Past*. Edited by M. Hall and N. Price. Scottish Archaeological Research Framework: Society of Antiquaries of Scotland. <http://tinyurl.com/bogzn5w>.
- Scheidel, W. 2002. "A Model of Demographic and Economic Change in Roman Egypt after the Antonine Plague." *Journal of Roman Archaeology* 15: 97–114.
- Shanks, M., and I. Hodder. 1998. "Processual, Postprocessual and Interpretive Archaeologies." In *Reader in Archaeological Theory. Postprocessual and Cognitive Approaches*, edited by D. Whitley, 69–95. London and New York: Routledge.
- Sharpe, M. 1918. "Centuriation in Middlesex." *The English Historical Review* 33 (132): 489–92.
- Shaw, C. 2005. "Dumbarton Castle, West Dumbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 6: 141.
- Shotter, D. 2000. "Petillus Cerialis in Northern Britain." *Northern History* 36 (2): 189–98.
- . 2001. "Petillus Cerialis in Carlisle: A Numismatic Contribution." *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, 3rd, 1: 21–29.
- . 2009. "When Did the Romans Invade Scotland?" In *Breeze, D (ed) First Contact: Rome and Northern Britain*, 15–19. Perth Scotland: Tayside and Fife Archaeological Committee.
- Sissons, J. B. 1976. *Scotland*. London: Methuen & co.

- Smith, J. 1918. "Excavation of the Forts of Castlehill, Aitnock, and Coalhill, Ayrhisre." *PSAS* 53: 123–34.
- Southern, P. 2007. "The Army in Late Roman Britain." In *A Companion to Roman Britain*, edited by M. Todd, 393–408. Blackwell Companions to British History. Oxford: Blackwell.
- Stafford, P., ed. 2013. *A Companion to the Early Middle Ages: Britain and Ireland c.500-1100*. Blackwell Companions to British History. Oxford: Wiley-Blackwell.
- Stead, I.M. 1991. "The Arras Culture." In *The Celts*, edited by S. Moscati, E.A. Arslan, and D. Vitali, 587–90. New York and London: Rizzoli ; Thames & Hudson.
- Steer, K.A. 1964. "John Horsley and the Antonine Wall." *Archaeologia Aeliana* 42: 1–39.
- Stevenson, J. 1995. *Glasgow, Clydeside and Stirling*. Edinburgh: HMSO.
- Stewart, D. 2005. "Dumbarton Castle, West Dumbartonshire (Dumbarton Parish), Evaluation; Watching Brief." *Discovery Excavation Scotland*, New Series, 6: 141–42.
- Stewart, D., and G. Ewart. 2001. "Dumbarton Castle, West Dumbartonshire (Dumbarton Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 2: 98.
- Strachan, D., and A. Clarke. 2013. *Excavations at the Black Spout, Pitlochry, and the Iron Age Monumental Roundhouses of North West Perthshire*. Perth: Perth and Kinross Heritage Trust.
- Swift, E. 2012. "The Analysis of Reused Material Culture for Late Antique Studies." *Late Antique Archaeology* 9 (1): 91–119.
- Symonds, M. 2011. "Fight Them in the Valleys." *Current Archaeology*, no. 251 (February): 20–27.
- Tacitus. 2006a. "Agricola." In *Agricola. Germania. Dialogus.*, translated by M. Hutton and W. Peterson, 1–115. Cambridge and London: Harvard University Press.
- . 2006b. "Germania." In *Agricola. Germania. Dialogus.*, translated by M. Hutton and W. Peterson, 127–228. Cambridge and London: Harvard University Press.
- Taliesin. 1968. *The Poems of Taliesin*. Edited by I. Williams. Translated by J. E. C. Williams. Mediaeval and Modern Welsh Series 3. Dublin: Dublin Institute for Advanced Studies.
- Thomas, C. 1961. "Excavations at Trusty's Hill, Anwoth, Kircudbrightshire, 1960." *TDGNHAS*, III, 38: 58–70.
- . 1971. *The Early Christian Archaeology of North Britain: The Hunter Marshall Lectures Delivered at the University of Glasgow in January and February 1968*. The Hunter Marshall Lectures. London & New York: Oxford University Press for the University of Glasgow.
- Tierney, J.J. 1959. "Ptolemy's Map of Scotland." *The Journal of Hellenic Studies* 79: 132–48.
- Tilley, C. 1994. *Phenomenology of Landscape*. Oxford and Providence: Berg.
- Tipping, R., R. Bradley, J. Sanders, R. McCulloch, and R. Wilson. 2012. "Moments of Crisis: Climate Change in Scottish Prehistory." *PSAS* 142: 9–25.
- Todd, M. 2007a. *A Companion to Roman Britain*. Blackwell Companions to British History. Oxford: Blackwell.
- . 2007b. "The Claudian Conquest and Its Consequences." In *A Companion to Roman Britain*, edited by M. Todd, 42–59. Blackwell Companions to British History. Oxford: Blackwell.
- Tony, W.L.H. 1997. *Birdoswald: Excavations of a Roman Fort on Hadrian's Wall and Its Successor Settlements, 1987-92*. London: English Heritage.
- Toolis, R., and C. Bowles. 2017. *The Lost Dark Age Kingdom of Rheghed: The Discovery of a Royal Stronghold at Trusty's Hill, Galloway*. Oxford: Oxbow.

- Trigger, B.G. 2006. *A History of Archaeological Thought*. Cambridge: Cambridge University Press.
- Truckell, A. E. 1964. "The Archaeological Collections of the Society." *TDGNHAS*, III, 41: 55–66.
- Turner, L. 2010. "56a Ardrossan Road, Seamill, North Ayrshire (West Kilbride Parish), Watching Brief." *Discovery Excavation Scotland*, New Series, 11: 118.
- Turrini, A. 2012. "Milton of Tassieholm". Unpublished MA dissertation, Edinburgh: University of Edinburgh.
- Wainwright, F.T., ed. 1955. *The Problem of the Picts*. Edinburgh: Nelson.
- Walton, P.J. 2011. "Rethinking Roman Britain: An Applied Numismatic Analysis of the Roman Coin Data Recorded by the Portable Antiquities Scheme". London: UCL.
- Wang, T., D. Surge, and S. Mithen. 2012. "Seasonal Temperature Variability of the Neoglacial (3300–2500 BP) and Roman Warm Period (2500–1600 BP) Reconstructed from Oxygen Isotope Ratios of Limpet Shells (*Patella Vulgata*), Northwest Scotland." *Palaeography, Palaeoclimatology, Palaeoecology* 317–8: 104–13.
- Welsh, T. C. 2004. "Hillhouse Plantation (Kirkpatrick-Juxta Parish)." *Discovery Excavation Scotland* 5: 37.
- . 2009. "Mote of Mark, Dumfries and Galloway (Colvend and Southwick Parish), Field Visit," New Series, 10: 54.
- White, N.J.D. 1920. *St Patrick. His Writings and Life*. Translations of Christian Literature, V. Lives of the Celtic Saints. London & New York: Society for Promoting Christian Knowledge.
- Wilson, A. 1966. "Romanization in South-Western Scotland". Unpublished MA Thesis, Durham: University of Durham.
- . 2001. "The Novantae and Romanization in Galloway." *TDGNHAS*, III, 75: 73–132.
- . 2003. "Roman and Native in Dumfriesshire." *TDGNHAS*, III, 77: 103–60.
- Wilson, J.B. 1982. "The Crannog in the Castle Loch, Lochmaben." *TDGNHAS*, III, 57: 88–89.
- Wooding, J. M. 2007. "Archaeology and the Dossier of a Saint." In *St Ninian and the Earliest Christianity in Scotland*, edited by J. Murray, 9–18. BAR British Series 483. Oxford: Archaeopress.
- Woods, D. 2003. "Acorns, the Plague and the Iona Chronicle." *Peritia* 17–18: 495–502.
- Woolf, A. 2003. "The Britons: From Romans to Barbarians." In *Regna and Gentes: The Relationship Between Late Antique and Early Medieval Peoples and Kingdoms in the Transformation of the Roman World*, edited by H. Goetz, J. Jarnut, and W. Pohl, 345–80. Transformation of the Roman World 13. Leiden and Boston: Brill.
- . 2007. "Introduction." In *St Ninian and the Earliest Christianity in Scotland*, edited by J. Murray, 5–7. BAR British Series 483. Oxford: Archaeopress.
- . 2012. "Ancient Kindred? Dál Riata and the Cruthin." In Academia.edu.
- Woolf, G. 2015. "Movers and Stayers." In *Migration and Mobility in the Early Roman Empire*, edited by L. de Ligt and L.E. Tacoma, 438–62. Studies in Global Social History 23. Leiden and Boston: Brill.
- Woolliscroft, D. 2009. "79 AD and All That: When Did the Romans First Invade Perthshire?" In *First Contact: Rome and Northern Britain*, edited by D. J. Breeze, 33–38. Perth: Tayside and Fife Archaeological Committee.
- Wyatt, A.J., ed. 1925. *Beowulf with the Finnsburg Fragment*. Cambridge: Cambridge University Press.

- Xu, L., L.C. Stige, K.L. Kausrud, T. Ben Ari, and S. Wang. 2014. "Wet Climate and Transportation Routes Accelerate Spread of Human Plague." *Proceeding of the Royal Society B* 281 (20133159): 1–9.
- Yorke, Barbara. 2009. "Kings and Kingship." In *A Companion to the Early Middle Ages: Britain and Ireland c.500-1100*. Ed. Stafford, Pauline, 76–90. Blackwell Companions to British History. Oxford: Wiley-Blackwell.
- Zerbini, A. 2015. "Human Mobility in the Roman Near East: Patterns and Motives." In *Migration and Mobility in the Early Roman Empire*, edited by L. de Ligt and L.E. Tacoma, 305–44. Studies in Global Social History 23. Leiden and Boston: Brill.

<http://archaeologydataservice.ac.uk/> [last accessed 09-2016]

<http://www.bt.cdc.gov/> [last accessed 07-2016]

<http://canmore.org.uk/> [last accessed 10-2018]

<http://www.huntsearch.gla.ac.uk/> [last accessed 10-2016]

<http://www.metoffice.gov.uk/> [last accessed 07-2016]

<http://www.nms.ac.uk/> [last accessed 10-2016]

<http://reaparch.blogspot.sk/> [last accessed 11-2-2018]

<http://www.scottishheritagehub.com/> [last accessed 11-2014]

<http://www.who.int/> [last accessed 07-2016]